

CHOICE

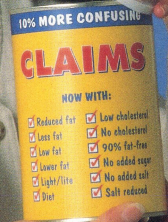
Lifting the lid on food label claims

Are they helpful or misleading?

Pre-packaged sandwiches
A food-poisoning time bomb?

Good wood: how to choose it
Building the 'green' way

More tests
Video recorders
Electric timers



WHEN YOU WALK ROUND A SUPERMARKET you often see people intently reading the claims on the label of a can or packet of food. Maybe you do it yourself — perhaps simply to find out what the main ingredients of a product are, or because you want to know whether the food is 'healthy' to eat. If that's the case, you'll probably be looking for claims like 'low-fat', 'light' or 'reduced-fat'. The problem is, when you find those claims can you be sure what they really mean?

The answer, unfortunately, is no. Not all of these so-called 'nutrient claims' are regulated in Australia for most foods, and at the time of writing, manufacturers can use 'light' or 'lite', for example, to mean just about anything they like. However, the National Food Authority (NFA) has been finalising a Code of Practice for nutrient claims, which should be launched this year. If industry follows it — and it's only a voluntary code — at least there will be some real definition of what claims like 'light', 'low-fat', etc, mean.

It's certainly a step in the right direction. But when we took a draft of the code out into the supermarkets and asked shoppers what *they* thought the claims meant, in many cases they didn't agree with the definitions in the code. This does nothing to reduce confusion, and we don't think the NFA has gone far enough towards meeting the shopper's need for clear, definite meanings.

On page 6 we discuss what various nutrient claims are proposed to mean under the new Code of Practice, report what shoppers actually thought they meant, and make CHOICE's suggestions for better definitions — ones that might increase people's understanding of the claims rather than adding to the confusion. Then on page 9 — since you can't always rely on the claims to mean what you'd expect — we tell you which ones to look for on 10 staple foods to be sure you're making good choices.

Happy label reading!



Jane Mackenzie
Editor

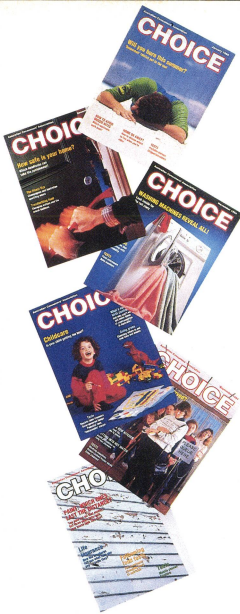
Who are we?

CHOICE EXISTS TO HELP YOU MAKE DECISIONS. It might be a question of which washing machine or fridge to buy, or which insurance policy or bank account to choose. It might be a case of giving you enough information about areas such as health, food and nutrition that you feel confident your decisions are based on sound knowledge. The reason you can rely on CHOICE is that the only interests we represent are yours — the consumer's.

We're not a government department or agency, and we get no ongoing funding from any government. Neither do we receive any subsidies from industry, manufacturers, unions or any other group, and we don't take any advertisements in the magazine. CHOICE survives purely because people like you subscribe to it: 85% of our income is from CHOICE subscriptions, and the rest from sales of our Consumer Bookshelf and CHOICE Books, plus some special technical services such as testing appliances for their energy efficiency labelling. So we're independent in the true sense of the word: beholden to no-one but the consumers we represent and who keep CHOICE alive.

The organisation behind CHOICE is the Australian Consumers' Association. This does more than just publish CHOICE: we represent consumers' interests at federal and state government levels as a balance to the influence of manufacturers and service providers. You can become a voting member of the Consumers' Association as well as a CHOICE subscriber if you wish. The small extra membership fee you pay demonstrates your commitment to the rights of consumers, and gives you a subscription to a second magazine — either *Consuming Interest*, our publication covering broader consumer policy, or *CHOICE Travel*.

Around 80 people work at CHOICE in roles ranging from processing your subscriptions to testing the appliances, answering consumer queries, writing the articles in CHOICE and *Consuming Interest*, and representing consumer interests in the public arena. We're here because you think you need us, you trust us and are prepared to pay to keep us going.



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Cover photo: Rhonda Thwaite

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Next issue

Portable CD players, car reliability, bread, sports drinks, food storage, living with a disability, CDs — more than music.

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Tests: Children's car restraints, dishwashers, 51 cm TVs, overlockers, electric heaters, exterior house paint, electric cooktops, film, video tapes, anti-scald devices for taps, mince.

Surveys: Financial planners, car insurance, how green is your home?

Reports: Lead: who is at risk?; eating kangaroo meat; air pollution; property: renting vs buying; using Australia's health system; skiing holidays.

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Because batteries contain heavy metals it's generally considered undesirable to put old ones into the garbage and take them to the tip. But you can't simply take them to a nearby recycling facility: there aren't any in Australia. So what can you do with old batteries?

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Some well-known brands were reformulating their products, which meant they weren't available in time for our report last month, so we've brought you an update to cover more of the market — both the so-called 'chemical' and 'natural' repellents.

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In this test we compared six models you can buy for close to \$500, and found them to be pretty good value for money compared with the more expensive ones we tested last time.

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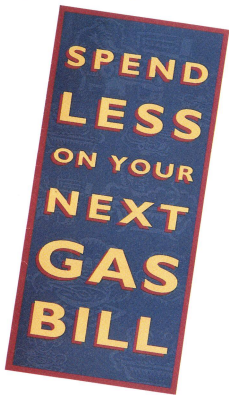
Plug-in timers can turn your appliances on and off when it suits you, perhaps to give the impression you're at home when you're not. That's the idea, anyway. We tested them to see if they live up to this promise, and found lots of problems with both safety and ease of use.



CHOICE CUTS

Bill paying

Unfortunately this brochure doesn't tell you how to spend less money — just time and energy.



TIME ISN'T MONEY

BEWARE OF SLOGANS which appear to promise one thing, but actually mean something totally different.

A brochure by AGL Gas Companies in NSW states on the cover that you can "Spend less on your next gas bill", yet on reading the fine print you'll discover that it's not money you'll save.

On the next page the brochure says, "You can now spend considerably less time and energy paying your gas bill ...". The brochure is about various payment options for your gas bill — there's no money saving involved at all.

Tax reforms

THE FRIENDLY TAX OFFICE

SOON taxpayers will have access to a new, improved tax system, as the Australian Taxation Office (ATO) undergoes various changes.

One major change is the introduction of a Charter of Rights, which will inform taxpayers of their rights and responsibilities. The charter is currently being developed by the ATO. Its aim is to clarify basic tax concerns, giving the public a formal, accessible document to rely on.

Also under way is the establishment of a

Small Taxation Claims Tribunal, providing quick, cheap and independent reviews of decisions made by the tax office. Individuals and small businesses will be able to take cases to the tribunal. A proposal to establish a taxation ombudsman could provide another avenue for people with a complaint against the tax office. This will hopefully improve equity in the tax system.

Could the tax office finally be trying to become your friend?



Water conservation

EVERY DROP COUNTS

IN THE MIDST of Australia's current drought a new conservation scheme has been designed to save and protect our most precious asset — water.

The National Water Conservation or AAA rating scheme shows people how to cut water use by highlighting the most water-efficient appliances to buy. The scheme is being supported by state and regional water authorities around the country.

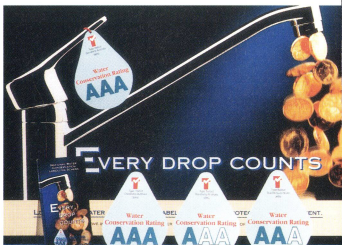
Under the scheme, water-using appliances are tested in accordance with the relevant Australian Standard. They are then granted labels on the basis of the volume of water they use. In most cases appliances have to be authorised under the National Certification of Plumbing and Drainage Prod-

ucts Scheme before they can be eligible for the labelling scheme.

One drawback is that, unlike the energy labelling scheme, the AAA scheme is voluntary — don't expect to see all water-consuming appliances with a label.

The red and blue water conservation labels are now on many major appliances and plumbing hardware. The more blue As on product label, the more water you'll save. If a product label has one blue A, it means that appliance will give an acceptable level of water efficiency; two blue As is a high rating; and three blue As is an excellent rating.

Buying appliances which have AAA labels will ensure you save water — and save money on your water bill.



Buy appliances with AAA labels if you want to save water — the more blue As the better.

LIQUID TROUBLE?

CAN small children be expected to know the difference between products they're supposed to eat and others that could harm or kill them, when things are packaged and marketed like this? We don't think so.

The 'Squeeze Pop' pictured below right is one of those novelties marketed at kids where the packaging is the product, but we think this one is over the top. The moisturising gel pictured with it is just one of a range of definitely non-edible products that come in extremely similar packaging.

A spokesman for the local distributors of this American line of confectionery told us they had never had a problem with it and

would be "loath to take it off the market". Asked if it sold well, he said, "It's huge." We wonder if it's the blue stuff itself — corn syrup, colours, flavourings, food acid and preservatives — that accounts for this popularity. If so, why couldn't it sell just as well in a different form of container?

If you don't want to run the risk — however slight — of your small children pulling the lids off everything in the bathroom like Winnie the Pooh in search of honey, we strongly suggest you keep them away from 'Squeeze Pops' and all similarly packaged products that could have the effect of training them to do just that.

Candy or cosmetic? We don't think young children could tell the difference.



CHILDCARE BROCHURE

In our childcare articles in the October and November 1994 issues of CHOICE, one information source we used was the ACTU's publication *Choosing child care: a parent's guide*. The ACTU believed we were going to name this booklet in the article, and has asked us to publicise its availability.

Choosing child care is available to parents through their unions and is regularly revised. The ACTU Childcare Office and its publications are supported by a grant from the Commonwealth Department of Human Services and Health.

We'd like to thank the ACTU for giving us access to its booklet. We rarely print the details of the research and source materials we use when researching an article, as there are so many for each one, but we're happy to acknowledge the contribution of *Choosing child care* to our childcare articles.

Yet another example of meaningless country of origin labelling.



YEAH, BUT WHERE?

WE think this is a new twist in the wrangle over honest country-of-origin labelling. The "made somewhere else" idea may comply with the letter of the labelling law, but it does seem to raise more questions than it answers.

Could such labelling represent a euphemism meaning "made in a country we'd rather not name"? As things stand with our laws, we may never know. Still, it's comforting to know the Australian content is there at the inspection stage.

KNOW YOUR RIGHTS

THE Australian Privacy Charter was launched in Sydney in December. It sets out 18 privacy principles detailing individuals' rights to privacy in areas such as data collection, communication, bodily privacy, private space, freedom from surveillance and right of access to information held about them. It is intended to be widely adopted by government and business as a benchmark for privacy policies, regulations, codes of conduct and all dealings with the public and the enormous amounts of personal information nowadays held in proliferating databases.

The Charter is the result of more than two years' effort by the Australian Privacy Charter Council, a group comprising a wide range of

people, some of whom aren't often found playing on the same team, but who share an interest in privacy issues. The Consumers' Association was represented on the council, along with organisations like Telecom, the Credit Reference Association of Australia and the NSW Privacy Foundation, and individuals including the Chief Justice of the NSW Court of Appeal, Michael Kirby, former leader of the Australian Democrats Janine Haines and rock singer/activist Peter Garrett.

You can get a copy of the Australian Privacy Charter by writing to: Tim Dixon, care of the Faculty of Law, University of NSW, 2052; or faxing to: (02) 313 7209.

Correction

WASHING MACHINES

(CHOICE, November 1994)

In the table on page 42, we listed the front-loading **HOOVER 555** as not having a heater, based on the information we had at the time. This is incorrect: it does have a heater.



Does 'low-fat' mean the same as 'light'?

Is 'reduced-fat' the same as 'low-fat'?

How does 'low cholesterol' fit in?

What do claims on food labels really mean?

And what do people think they mean?

GONE ARE THE DAYS WHEN YOU could buy sweets or snacks, sauces or spreads that simply claimed to be 'sweets' or 'snacks'. Now you're getting 'no cholesterol' chips and sauces with 'no added salt'.

The number of nutrient claims used on processed foods is staggering. We found over 130 different ones on around 370 products sold in supermarkets. Most commonly they referred to fat and cholesterol (cholesterol-free, light or lite, polyunsaturated, no cholesterol, reduced-fat, low-fat) and sugar or salt (no added sugar, no added salt), and featured most prominently on dairy products, oils, soft drinks and breakfast cereals.

At the moment in Australia only some nutrient claims for certain foods are defined by food standards regulations (for example, low-fat yoghurt and reduced-fat cheese). Late last year, however, the National Food Authority (NFA) was finalising a Code of Practice for nutrient claims which should be launched early this year. While such a code is a step in the right direction and provides guidelines for the industry, it's unfortunately only a voluntary code. It can't be enforced by law and compliance relies on the honour of the industry.

In the draft stage, the NFA circulated the Code of Practice to relevant parties for comment; we took our draft and tested some of the proposed claims with shoppers in the supermarket. In April and May last year we interviewed 408 consumers (232 women and 176 men) in various supermarkets in three Sydney suburbs, plus Dubbo and Wollongong, and asked them what various nutrient claims meant to them. We used their answers and our other research findings to identify the claims we think are confusing or misleading and give some examples of where you might find them meaning different things on different foods.

Food label claims: what do they mean?

Reduced — lower — less

Many naturally high-fat products such as some cheeses and dairy desserts have 'reduced-fat' counterparts.

In our shopper survey a problem emerged with the 'reduced-fat' claim: more than half the people we asked regarded it as an absolute term. For example, they thought 'reduced-fat' milk had the same fat content as 'reduced-fat' yoghurt and cheese. But the fat content in 'reduced-fat' products varies considerably from one food to another; for example, 'reduced-fat' milk has about 2% fat but 'reduced-fat' cheddar cheese has around 25%!

The variety of terms currently used on the market for 'reduced-fat' products doesn't help consumers either. 'Lower fat' and 'less fat' appear to be used to mean the same as 'reduced-fat', but our survey indicated that people confuse these terms with 'low fat' — which generally means something different under the Code (see *Low means 3% or less*, below).

The new Code of Practice says if a product is labelled 'reduced-fat' (or reduced sugar, salt or energy), one of the requirements is the reduction should be by at least 25% compared with a reference food.

The reference food is usually the brand's regular product, but it could also be competitors' products or a standard food. If the industry complies with the new Code of Practice, you'll no longer have to guess what the reference food is: the Code says it should be declared

■ We'd like to see only *one* term — **reduced** — used to indicate that a product has a reduced-fat content. Although a statement of the percentage fat reduction is required under the Code, we'd like to see the total fat content stated as well.

Light doesn't always mean low

Many products claim to be 'light' or 'lite' — it's not so obvious, however, what

these terms refer to. There are 'lite' or 'light' yoghurts, dairy spreads, frozen meals and ice creams. Maybe they're low in fat or have a lower fat content than similar products. Who's to know from the label whether the term 'light' refers to texture or consistency, as in some whipped desserts, for example, or to colour, as in light olive oil, which is a light green in comparison with first-pressing cold-pressed oil?

More than half the people we interviewed thought yoghurts labelled 'light' or 'lite' had a low or lower fat content. They were right; these yoghurts generally contain less than 1% fat and are low-fat foods. However, one in three people believed oils labelled 'light' or 'lite' were also low or lower in fat, which isn't the case. Oils are high in fat — they are generally close to 100% fat, including those labelled 'light'! Many shoppers are



Low in fat? Or pale in colour?

obviously misled by 'light' or 'lite' claims when they mean something other than lower in fat.

According to the new Code of Practice, a 'light/lite' product should:

■ Mention the characteristic which makes the food 'light/lite'; for example, 'light in fat', or 'light in colour', 'light in texture'. We fully agree — it should also be printed close to the claim and in letters of the same size and colour.

■ Meet the criteria for foods labelled 'low' or 'reduced' for a certain nutrient. We'd rather cut the confusion even further and make 'light/lite' only mean one thing, and preferably that the product meets the criteria for products labelled 'low' in a nutrient.

Low means 3% or less

Low-fat versions of yoghurt, ice cream, cheese and spreads are defined under food standards regulations. According to the new Code of Practice, other foods claimed to be 'low' in fat should contain less than 3 g of fat in 100 g of food (or



But why would you expect it to have any?

1.5 g in 100 g of liquid — half the amount because they're generally consumed in larger quantities). When the food has a low-fat claim and is naturally low in fat, this should be stated on the label. For example, a 'low-fat' claim on bread should appear as a statement like 'Bread — a low-fat food', with no implication that 'low-fat' is brand-specific.

■ 'Low' and 'light' are likely to mean the same thing to shoppers, and on some products they're even used interchangeably. We'd like to see the same criteria apply to products claimed to be 'light/lite' in fat as to those called 'low-fat': they should contain no more than 3% fat.

Cholesterol

Many people have heard of cholesterol and want to reduce it, but in fact our survey showed very few know enough about it to make informed choices when shopping. And it's indeed confusing — we should be concerned if our blood cholesterol level gets too high, but this isn't the same as the cholesterol content in food.

Take the case of a margarine labelled 'fight cholesterol', for example. Nearly one third of the people we spoke to in our survey correctly associated it with lower or low food cholesterol, or thought the product was cholesterol-free — which it is. However, one in 10 thought the margarine was low in fat or fat-free (it isn't), another tenth thought it was associated with blood cholesterol level and a few thought it would prevent or cure heart disease; it does no such thing. Margarines and oils are naturally cholesterol-free because they're vegetable-based. What they do contain is fat — around 80% and 95% respectively.

We can only repeat the common wisdom: no *one* product or food can be claimed to prevent heart disease; it's the balance of food in a diet that counts. While cutting out high-cholesterol food may play a part in reducing the risk of heart disease, it's much more important



By how much? By half? By 25%?

to cut down on saturated fats and to keep the overall fat content in a diet low.

■ According to the Code of Practice, claims such as no, low, lower, reduced or less cholesterol are subject to certain levels or limitations. In this respect we think the Code doesn't go far enough. Even if a 'no cholesterol' claim on oils or margarines is correct, the message is still misleading, as shoppers readily confuse it with 'low-fat' or similar claims. We think cholesterol claims on products containing fat — whether 'fight cholesterol', 'low in cholesterol' or 'no cholesterol' — shouldn't be used at all, so as not to add to that confusion.

% fat-free

It might seem that positive statements such as '97% fat-free', or '80% fat-free' are straightforward — after all, it's easy enough for most people to calculate the fat content. Our survey showed, however, that even such apparently simple, numerical claims can be confusing. For example, some of the shoppers we questioned thought the 97% fat-free frozen meal was completely fat-free; others thought the '90% fat-free' mayonnaise was low in fat — but with a 10% fat content it certainly isn't. While percentages appear easy enough to add up, how they're expressed is likely to influence shoppers' purchasing decisions. After all, 80% fat-free sounds better than 20% fat!

Packaged mince was an interesting case in our survey. Nearly half the people we asked thought the positively labelled '80% fat-free' mince was lower in fat than 'lean mince' — which it isn't.

According to the Code of Practice, 'x% fat-free' claims should meet the criteria for low-fat foods (see *Low means 3% or less*) and should also state, close to the claim, the actual fat content as a percentage: for example '97% fat-free, contains 3% fat'. Why bother with two percentages if they only cause more confusion?

■ If percentages are used at all, the fat content alone should be stated, not the

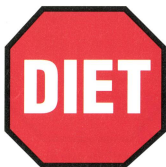
percentage that's claimed to be free of fat. Hence: '3% fat', not '97% fat-free'.

Diet

Although the term 'diet' would seem to have a lot of potential for confusion, shoppers in our survey understood it quite well on soft drinks. Three out of four correctly associated the 'diet' claim with low or no sugar content or with low calories. In our survey, we only asked people about 'diet' claims on artificially sweetened soft drinks and yoghurts; the latter were also low in fat, which was generally indicated by another claim: 'light/lite'.

The 'diet' claim seems to be used currently for products which are fairly low in kilojoules/calories. Statements that the food is slimming or has intrinsic weight-reducing properties are prohibited.

■ We believe 'diet' should be used to indicate that the product is low in kilo-



**They've cut the calories,
but how many are still in it?**

joules/calories per serving, not just that it's artificially sweetened. That means if it's used on a product that contains fat, it should be low in fat as well.

No added: sugar or salt

A product claimed to have 'no added sugar' isn't automatically a sugar-free or low-sugar food. The 'no added sugar' claim is currently regulated and can only be used on products to which neither sugars nor honey, malt, malt extract or maltose have been added. But it may well intrinsically contain sugars such as fructose or glucose which, like all sugars, if consumed frequently can contribute to dental decay.

What's disturbing is that such 'no added ...' claims are often found on products fairly high in sugars or salt, but our survey showed that about half the people we spoke to thought products labelled 'no added sugar' or 'no added



But how much does it already have?

salt' contained no or little sugar or salt. Orange juice is a good example. From the products we looked at, the 'no added sugar' orange juice contained 8.5 g of sugar per 100 mL — that's just 2.4 g less than the brand's regular product, but more than three times as much as that suggested in the Code of Practice for a 'low-sugar' drink. We think the Code could go further and say:

■ Products labelled 'no added sugar' or 'no added salt' should also state the product's total content of sugars or salt close to the claim and, where appropriate, should clearly indicate that it's not a low-salt/sugar food.

Conclusion

In the supermarket, apart from keeping an eye on prices — and accompanying children, perhaps — shoppers frequently have to make decisions on the spot when deciding which products to buy. A nutrient claim, printed in bold on the product label, can make that decision easier. It can save precious time looking up the nutrient panel and perhaps doing some complicated mathematical calculations. But for the claim to be reliable, the information given must be correct, appropriate and meaningful.

At the moment, many claims are frequently misunderstood, misinterpreted or simply misread. Shoppers are confused. Reducing the number of claims allowed would be one major step forward. A second step in the right direction would be to standardise the terms used and their meanings (so that 'light in fat' on cheddar cheese means the same as 'low in fat' on yoghurt, for example) and, last but not least, to stop using altogether terms that actively mislead people about what's important nutritionally (like 'cholesterol-free').

We will be monitoring the Code when it's introduced, and letting industry and the NFA know about any problems we find. □



But that's still 20% fat - not a low-fat food.

What to look for: a shopping guide to better choices

SPREADS: MARGARINE AND BUTTER

What to look for:

'Reduced-fat' or 'light/lite' plus 'polyunsaturated' or 'monounsaturated'. If you're concerned about your salt intake also look for 'unsalted' or 'reduced' sodium/salt. Spread thinly.

- Don't be fooled into thinking spreads with 'reduced-fat' or 'light/lite' claims are low in fat — no spreads are. They do have at least a quarter less fat than regular spreads, so they can help you cut down, but you still need to spread them thinly.
- Butter is made from animal fat, which is mostly saturated and contains cholesterol. Most margarine-type spreads are made from vegetable oils, which are polyunsaturated (such as sunflower or safflower) and/or monounsaturated (like olive or canola). These types of oil naturally contain no cholesterol, so if you're buying margarine don't worry about looking for 'cholesterol-free' type labels.
- Cream cheese is one alternative to butter or margarine — it has about half the fat ('light/lite' versions have about one quarter), provided you spread the same amount.



CHEESE

What to look for:

'Light/lite' or 'reduced-fat'. Go easy, it still contains fat.

- Don't be taken in by 'reduced-fat' or 'light/lite' claims on cheese. Their fat has been cut, but most are still one quarter fat — that's one bite out of every four. 'Reduced-fat' cheeses can help you cut down, but you can't eat them in unlimited amounts. The lowest-fat cheeses are those like cottage and ricotta.
- Cheese does contribute to your calcium intake, but the fat piles up if you try to get all your calcium from it. And unfortunately low-fat cottage and ricotta don't have much calcium at all.
- All cheese can be pretty high in salt, but there are a few 'reduced-salt' versions available which can help you cut down. Bear in mind, though, they aren't low in salt. Some types of regular cheese are naturally lower in salt, such as cottage, mozzarella, ricotta and Swiss cheeses. These have around the same level as 'reduced-salt' varieties.

MILK

What to look for:

'Low-fat' or 'skim' — 'reduced-fat' or 'light/lite' are halfway there. 'High calcium' if you're particularly concerned about your calcium intake. (But remember that low-fat and reduced-fat milks are not suitable for very young children.)

- Milk is a good source of many important nutrients, particularly calcium, but if you drink several glasses a day, the amount of fat can really add up. Regular milk has around 4% — that's about two teaspoons of fat in a 200 mL glass. If you choose 'light/lite' or 'reduced-fat' milk, you cut the fat to around half that much. 'Low-fat' and 'skim' milk have virtually no fat at all.
- Some lower-fat milks boost their calcium levels even further, by adding extra skim milk powder to thicken it and to give a better consistency. These usually come with 'high calcium' or 'added calcium' claims.

YOGHURT

What to look for:

'Light/lite' or 'low-fat' if you're only concerned about fat, plus 'diet' if you're watching calories too.

- 'Light' or 'lite' on a yoghurt label refers to the fat content. This type of yoghurt is made from skim milk, so has almost no fat, and that's good news for healthy eating.
- However, watch out for the calories in 'light/lite' fruit yoghurts. They're low in fat, but the added fruit and sugar mean they're still fairly heavy in calories. For a really calorie-conscious alternative look for 'diet' on the label, as well as 'light/lite'. An artificial sweetener is used to cut the sugar content of 'diet' yoghurts.
- 'Natural' yoghurt has no flavourings added. That means no calories from fruit or sugar, but unless it's also a 'low-fat' or 'light/lite' yoghurt, the fat means extra calories.
- Yoghurt, like other dairy foods, is an important source of calcium, and the 'diet light/lite' versions mean you can top up on calcium without all the extra fat and calories.

MAYONNAISE AND DRESSING

What to look for:

'Oil-free' or 'no oil' dressings. 'Light/lite' or 'reduced-fat' mayonnaise. Try mixing mayonnaise half and half with 'light/lite' plain yoghurt for an even lower-fat alternative.

- Dressings that are based on oils can pile on the fat and calories. Mayonnaise in particular is by its very nature fairly high in fat. It's generally a polyunsaturated or monounsaturated fat, but still needs to be used carefully.
- Claims like '90% fat-free' can be confusing. This doesn't mean 'low-fat' by any stretch of the imagination; in fact it means 10% fat. Some 'reduced-fat' or 'light/lite' mayonnaises are available and these can help you cut down on fat and calories. But remember they aren't low in fat, so you still need to use them sparingly.
- 'Cholesterol-free' claims can give you a guide to whether egg yolks have been used in a mayonnaise, but the value of 'low cholesterol' is generally overshadowed by the fat content.



FRUIT JUICES AND JUICE DRINKS

What to look for:

'Fruit juice' plus 'no added sugar' or 'unsweetened'. All fruit juices contain sugar and calories.

- Fruit juice contains sugar which is naturally present in the fruit. Even 'no added sugar' and 'unsweetened' juice contains sugar; all this claim means is that the manufacturer hasn't added any extra.
- If you want 100% juice, always look for the words 'fruit juice' rather than 'fruit drink' on the label. If the label describes the product with the word 'drink', you can be pretty sure it's not all juice. In fact, though many contain about 25% juice, 'fruit drinks' only need to contain as little as 5%. That's only around two teaspoons in a 200 mL drink box.

MEAT

What to look for:

'Lean' mince, 'Trim Lamb', 'Lean Beef'. Trim visible fat off all meats; skin chicken.

- The claim 'lean' is only legally defined for mince. 'Lean' mince must have 10% or less fat. You will sometimes see claims like '80% fat-free', but don't be misled: that's still 20% fat.
- The Australian Meat and Livestock Commission defines 'Lean Beef' and 'Trim Lamb' as special trimmed cuts with 10% fat or less. But general descriptive claims like 'premium' or 'trimmed' could mean anything.
- Be on the lookout for fat which is spread throughout the meat (marbling), as you can't cut this off.

OILS

What to look for:

'Polyunsaturated' or 'monounsaturated'. Use sparingly; all oil is high in fat.

- All oils are practically all fat. It doesn't matter if they are 'cholesterol-free', 'light', 'lite', 'polyunsaturated' or anything else. This means they're all high in calories too. So the bad news is that you should keep all oils to a minimum.
- Oils described as 'light/lite' are particularly confusing — it's usually their pale colour or less strong taste that's being referred to, not their fat content. 'Extra light' sounds extra good, but it's still just the colour or flavour that's different.
- 'Cholesterol-free' or 'no cholesterol' are common claims, but if the oil is liquid at room temperature, chances are it's vegetable-based, and that automatically means no cholesterol. Only animal fats have cholesterol, so forget cholesterol claims for oils. Look instead for oils which are polyunsaturated or monounsaturated: for example, sunflower, safflower, olive and canola.

CHIPS, SNACKS AND SWEETS

What to look for:

There is no particularly healthy choice — go easy on them all!

- Claims on snacks are a minefield. Don't be taken in by 'baked not fried' or 'cooked in vegetable oil'. Neither of these means low in fat, and the product could be positively swimming in it.
- Fat can be listed as oil, animal or vegetable fat, butter, margarine, hydrogenated fats/oils or fatty acids, to name just a few.
- Salt can appear as sea salt, sodium, yeast extract or soy sauce.
- Sugar probably has the longest potential list: sucrose, glucose syrup, dextrose, honey, corn syrup, brown sugar, raw sugar, fructose and just about anything else that ends in -ose.
- Remember, the ingredients at the top of the list are present in the highest amounts.
- Watch out for claims of 'light' as well. You might think it means lower in fat, but to the manufacturer it could be lower in salt or colour or flavour, or simply have a lighter, crisper texture!



BREAKFAST CEREALS

What to look for:

Check the nutrition panel: less than 20 g sugar per 100 g, plus less than 600 mg sodium per 100 g, plus 'high fibre' or at least 7 g dietary fibre per 100 g. These guidelines are for cereals for everyday eating. For the last word on which cereals to buy, see CHOICE, January 1994.

- In their natural state, cereals are low in fat, sugar and salt, and high in fibre. As they journey from the farm to the box, most are changed, and some can become nutritional nightmares that aren't good choices for everyday eating.
- Checking out the fat content is the easiest part — unless they are 'toasted' you can generally count on it being pretty low. Of course if you add the wrong kind of milk (see Milk on page 9) that can change.
- Manufacturers often add sugar to breakfast cereals, so 'no added sugar' cereals can be a good choice, but check the

nutrition panel. Sugar can appear in a number of guises and dried fruit is a common one. If the panel shows sugar at less than 10 g per 100 g that's good; up to 20 g and you're still not doing too badly. Over 20 g per 100 g and you're not looking at a cereal that will do much towards giving you a balanced diet if you eat it every day.

- Cereals can, and do, have salt added. Look for 'no added salt' or 'low-salt' claims. Or check the nutrient panel; salt is referred to as sodium and less than 600 mg/100 g is a good guide.
- 'High fibre' is a common claim, and it should point you in the direction of the best choices for fibre, so look for it. If there's no claim, check the nutrient panel — at least 7 g of dietary fibre per 100 g makes a good choice.
- Claims for added 'vitamins and minerals' may seem tempting, but remember, no amount of added vitamins can counteract high levels of fat, sugar or salt, or low levels of fibre.



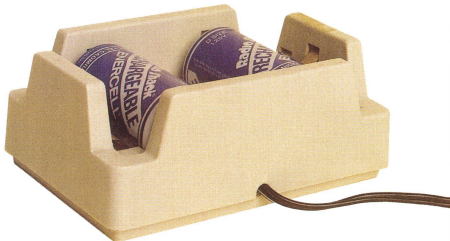
Phasing out the nasties

Among environmentally conscious people, the common wisdom is that you shouldn't just put old batteries into the garbage and send them to the tip, because of the heavy metals they contain. But you can't simply send these batteries to a nearby recycling facility: there aren't any in Australia. So what can you do with old batteries?

SINCE THE EARLY 1980s, BATTERIES have been particularly targeted as environmental pollutants in many developed countries. The two most dangerous metals in dry cell batteries are mercury and cadmium, which are highly toxic. In soluble form, they can leach into ground water and become concentrated in food chains.

Over the past decade environmental campaigning has paid off. Major battery and electronic appliance manufacturers have significantly reduced the mercury content in common household batteries. Most of the new zinc-carbon and alkaline batteries currently available on the Australian market no longer contain any added mercury. While some button cells (used mainly in medical equipment) still contain mercury, the overall amounts used are negligible. The pollution problem has therefore been tackled where it's most important — at the source.

From the information we've been able to gather from environmental groups, waste management organisations and environmental protection authorities, it's OK to discard small quantities of non-rechargeable dry cell batteries — such as the average household would normally generate — in your household garbage. Disposing of them together with municipal waste in well-managed, lined landfills is a "viable option", according to the Office of Waste Management at the WA Environment Protection Authority (EPA), which recently drafted guidelines for the disposal of batteries. Landfills lined with rubber or plastic membranes, with thick layers of clay, or with special collection systems are designed to prevent any substances



Rechargeable nickel-cadmium batteries make sense environmentally — but when they die the cadmium in them means you shouldn't just toss them in the garbage.

that leach out from the waste from contaminating ground water.

The EPA in NSW even suggests that domestic quantities of alkaline batteries can be discarded at ordinary, unlined landfills, such as council tips. However, problems may arise if garbage is incinerated or kept in dry, sealed landfills, as in some countries overseas.

So if you're using large amounts of batteries, are concerned about possible environmental effects and unsure about the disposal system used in your area, consider using the appliance with an adaptor for mains electricity or switching to rechargeable nickel-cadmium batteries.

What about cadmium?

Of the 150 to 175 million general-purpose batteries sold in Australia each year, rechargeable nickel-cadmium (Ni-Cad or NiCd) ones currently represent about 1% of the market. From a waste

minimisation point of view, NiCads are more desirable than non-rechargeable batteries, as they can be recharged 500 to 1000 times, according to manufacturers. But they do consist of up to 17% cadmium, and when they eventually reach the end of their useful life, this highly toxic heavy metal should not end up in landfills. These batteries should be recycled.

However, while the technology exists to recycle home-use NiCad batteries, the cost for the recycling equipment, or for storing and shipping them overseas, has made recycling unattractive for Australian manufacturers and distributors. According to some, a recycling plant couldn't be run cost-effectively in Australia, even if a public awareness campaign resulted in a high volume of returned batteries. Very few are in fact returned, and they're either sent to recycling facilities overseas or stockpiled in Australia. Batteries collected by various

public or private hazardous waste collection services may be encapsulated in concrete or made safe by some means other than recycling.

While consumer awareness of even these collection schemes seems to be low, in the future people who buy rechargeable batteries or appliances containing them should receive more information about the arrangements in place for recycling. The Trade Practices Commission recently concluded an investigation into the 'recyclability' of rechargeable batteries, some of which had been promoted as recyclable or had featured a recycling symbol. It found that it isn't enough for goods that bear a recycling symbol to be "inherently or potentially recyclable"; recycling must be a "readily available option for consumers". At the time of the investigation, most of these batteries did *not* meet these criteria: they were neither returned nor collected for recycling overseas.

As a result of the investigation, 10 significant companies (the Australian divisions of or suppliers for Adeal, Arlec, Eveready, Hagemeyer, Hitachi, IBM, Makita, NEC, Panasonic and Power Cell) have now given legally enforceable undertakings under the Trade Practices Act, to introduce recycling initiatives or steps to promote collection schemes. Twenty other companies have also committed themselves to introducing similar steps. The most common undertakings are:

- Not to sell batteries or battery packs with the recycling symbol on them, or describe them as 'recyclable', unless recycling facilities are available.
- To collect and recycle returned spent batteries or battery packs that feature the recycling symbol.
- To offer rebates on returned batteries to encourage recycling.
- To advertise in newspapers about recycling arrangements.
- To arrange with retailers to establish collection points across the country.
- To post recycling and collection instructions to past purchasers.
- To insert recycling instructions in manuals or with packaging of new goods.
- To set up telephone advice lines about battery recycling.

These undertakings, together with

search and development into new batteries, are a step in the right direction if we want to reduce the overall burden of waste and pollutants in the environment. Whether they are sufficient or need to be reinforced by legislation remains to be seen. Currently no state or territory has legislative requirements for the disposal or recycling of household batteries. Only the recycling of spent NiCad batteries falls under the auspices of the Commonwealth; it requires a permit under the Hazardous Waste Act.

However, as these batteries are exported rather than recycled at home, current practices could have implications under the Basel Convention. (Last March, 64 countries including Australia agreed to phase out and prohibit by the end of 1997 the movement of hazardous waste for recycling from developed to developing countries.) The Environment Protection Authority is currently discussing options for the future with the Trade Practices Commission. □

COMMON BATTERY TYPES

■ **Zinc-carbon** batteries, the traditional and cheapest type among the single-use batteries, can be used in many small appliances where the load is light to medium and the appliance isn't run continuously. Slightly more expensive are **zinc chloride** batteries, which are generally labelled 'heavy duty' or 'super'. Because of their higher capacity, **alkaline** batteries are increasingly used instead of zinc-carbon batteries. They're especially suitable for continuous or high-drain uses, such as in electronic equipment, radios and torches.

■ Rechargeable **nickel-cadmium (NiCad or NiCd)** batteries are either sold separately or are built into consumer electronic appliances such as shavers and portable tools. Single cells operate on 1.2 V (as distinct from the standard 1.5 V for alkaline and zinc-carbon cells); in battery packs several cells are combined. While more expensive than alkaline batteries, NiCads can be recharged many times and therefore work out cheaper for products which are used regularly and have medium to high current demands, even though they initially require the financial outlay for a NiCad recharging device.

■ Various types of **button cell** are used in medical equipment, hearing aids, watches and cameras. **Mercuric oxide** cells contain high levels of mercury — 30% or more — but they're increasingly being replaced by a number of alternatives. **Silver oxide** cells, for example, still contain some mercury, but much less than the mercuric oxide type. The industry is currently researching ways of eliminating the mercury in button cells as well, without compromising price or capacity. **Zinc-air** batteries have generally replaced mercuric oxide cells in hearing aids. **Lithium** batteries, which are also available in sizes other than button cells, are fairly expensive. While they're free of mercury, lithium is highly reactive and this type of battery may pose its own problems during storage and disposal.

■ **Nickel-metal hydride (NiMH)** or **nickel-hydrogen (Ni-H)** batteries are relatively new on the market. While they're not yet readily available as replacement batteries in Australia, you may find them built into certain electronic appliances such as portable computers, shavers, cellular phones and camcorders. They're more expensive than NiCads, but according to the US Consumers' Union, they're a useful if imperfect alternative, and with further development they'll probably replace NiCads over time.



Beyond Choice

The policy and media section of the Consumers' Association continues to champion consumer interests in the three main areas of its work — food, money and health.

ONE OF OUR ACTIVITIES IN THE LAST three months was triggered by the recent export beef scandal. Pesticide residues were found in beef destined for Japan because drought-stricken Australian farmers, desperate to keep their cattle alive, had fed them waste material from cotton production. We looked at what this means for domestic consumers. The news is not good — there is a great disparity between the checking of export meat and meat which is destined only for the Australian market. We're pushing government to ensure domestic consumers get the same level of protection as they give consumers overseas, and we'll be aiming to keep the government honest when it claims to overseas buyers that our products are 'clean and green'.

On another food topic, the National Food Authority (NFA) has food irradiation back on its agenda. The NFA's dead-

line for comment on the report by the World Health Organisation (WHO) on the safety of irradiated food is about to close and we've been in there trying to ensure the consumer is put at the forefront of the debate. As it stands, there is no test yet which can be used to detect irradiated food. Our minimum requirement is that irradiated food be labelled to allow consumers choice, but this can't be enforced until such a test is available. It remains to be seen if irradiation will continue to be banned in Australia — we'll keep you posted.

Fragmenting schemes

The Consumers' Association has growing concern about the increasing fragmentation of dispute resolution schemes in the financial services sector. Alternative dispute resolution procedures are a great idea — they complement the tradi-

tional legal system. But because they now exist in such great numbers and have such narrowly defined jurisdictions, they are very confusing to consumers.

We want the Commonwealth Government to establish a single financial services ombudsman to cover all advisers, intermediaries and product suppliers of deposit-taking institutions, insurance companies and fund managers in the retail sector.

Health system changes

We have also been active again on the health policy front. While we have given cautious support to the federal health minister's private health insurance reform package, consumers have every reason to be worried that all is not well in Australia's health system. In particular, new funding models introduced to increase efficiency and cost saving may backfire on consumers. Is it really efficient if a hospital achieves great productivity as length of stay is reduced but patients are leaving hospital while they're still sick? Is it efficient if a medical team very competently restores a person's health but in the process patients are treated with impersonal, remote and harried attention or their rights to privacy and quality of service have been ignored because the hospital is achieving cost savings by employing insufficient staff?

We debate all these issues in the summer edition of our policy magazine, *Consuming Interest*.

One particular health policy issue we took to the media to publicise recently was consumers' demand for access to their own medical records as a fundamental human right. To put it in a nutshell, in a good health care system patients and doctors are equal partners, so why would one partner want to keep a secret file? Not giving people access to their own medical records helps to maintain the unfortunate mystique surrounding many doctors and keeps health consumers in the role of powerless, ignorant recipients. We think the current situation, in which there are different legal requirements for records kept in the public and private sectors, is completely unsatisfactory for consumers. □



Bad news for consumers: there's often a great disparity between the level of inspection of meat for export and that for the Australian market.



TOILETRIES



The brands we priced in Australia

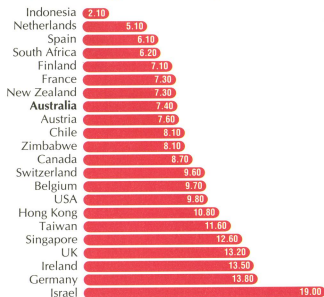
Condoms (per 12)



Deodorant (per 25 mL)



Sunblock (per 125 mL)



Toothpaste (per 100 g)



All prices in Australian dollars (to nearest 10 cents), based on exchange rates quoted in the *Australian Financial Review*, November 14, 1994.

Note that the prices are not related to local income levels and are therefore most useful as a gauge of what the Australian dollar will buy in the countries named.



THE QUICK LUNCH FIX

Is it safe to eat pre-packaged sandwiches or could they make you sick?

OUR TEST OF 89 PRE-PACKAGED sandwiches shows that what you bite could be bad for your health.

Thirty sandwiches proved to be of poor quality because of the high number of all types of bacteria, the presence of food poisoning bacteria and/or high levels of bacteria which indicate poor storage and handling (see *What we did*, opposite, for more on these bacteria).

In fact, our test results support the

views of John McMahon, Acting Manager, Food and Nutrition Policy Unit, NSW Department of Health. He claims that because many sandwiches are poorly stored and kept for too long they are "time-bombs waiting for food poisoning to happen".

WHAT WE FOUND

High bacterial levels and *Listeria monocytogenes* in some sandwiches were our

most worrying finds. No one sandwich filling — beef, chicken or salad-based — was problem-free, with a third of our samples judged to be of poor quality. Some of the poor-quality sandwiches had probably been stored at warm temperatures and/or were at the end of their shelf-life. We recommend you always purchase pre-packaged sandwiches from a fridge.

Listeria monocytogenes is a pathogen (disease-causing bacterium) in its own right. In our samples it was detected in three beef, four chicken and two salad-based sandwiches. Its presence is not necessarily an indicator of poor storage because it can grow at refrigerated temperatures. Rather it's a good indicator of contaminated ingredients and/or cross-contamination. It's often found on raw vegetables but better handling procedures can ensure it won't spread to different food fillings through utensils and cutting boards.

We didn't find *E. coli* to be a major problem, though we found it in two beef, one chicken and two salad-based sandwiches. Its presence is an indicator of

THE SANDWICH EARL

The quick lunch fix we fondly term the sandwich had its origins, according to the English, with John Montagu, the fourth Earl of Sandwich, when he requested a servant to bring him a chunk of beef between two slices of bread so he could eat without interrupting his gambling. The French, however, claim that the sandwich represented the staple lunch diet for French farmers well before the arrival of the Sandwich Earl.



poor hygiene practices — for instance, it can be a sign some sandwich makers don't wash their hands after using the toilet.

Staphylococcus aureus, while not appearing to be a common problem, was found in levels that were high in one chicken and two salad-based sandwiches. Its presence can indicate contamination from the nose and throat through sneezing and coughing.

The good news is that none of the sandwiches contained *Campylobacter* or *Salmonella* — both of which are important as they can cause serious food poisoning. Figure 1 shows exactly why we deemed some sandwiches to be of poor quality.

WHAT OTHERS HAVE FOUND

When the Western Australian Health Department (WAHD) conducted similar tests on 817 sandwiches with various fillings purchased throughout the state, it found 66% of its samples had high total bacterial levels.

The WAHD tested both refrigerated and unrefrigerated sandwiches. Its results clearly testify to the absolute necessity for refrigeration and the need to enforce better work practices for food handlers. Half of the samples which had been stored at less than 10°C had high levels of bacteria. This was bad enough, but 72% of samples which had been stored in temperatures above 15°C (frequently at room temperature) had high bacterial levels.

The presence of *Listeria monocytogenes* was also of some concern — it was detected in 13% of the chicken and 7.5 % of the beef.

The Australian Capital Territory health department also did a study on 1087 sandwich samples collected from 1991 to 1993. Over that period, in six of the seven surveys more than half of the sandwiches had bacteria levels that were too high.

HYGIENE AND STORAGE NEED IMPROVEMENT

Our results indicate the hygiene and storage practices of pre-packaged sandwich makers and retailers could be improved. Most of the sandwiches which were deemed poor quality had high bacterial levels, so poor storage (either temperature or time abuse) appears to pose the greatest problem — the bacteria had been given a chance to multiply.

The bottom line is that you should always buy pre-packaged sandwiches from a fridge or refrigerated display. Don't buy a sandwich if it is sitting on a counter at room temperature.

WHAT WAS WRONG WITH THEM?

We tested 89 pre-packaged sandwiches from Brisbane, Sydney and Melbourne for food-poisoning and other bacteria. The sandwiches were purchased from mobile canteens, railway stations, service stations and major airport outlets, where pre-packaged sandwiches dominate. We chose sandwiches with three popular fillings: beef, chicken and salad-based. All sandwiches were kept chilled during delivery to the testing laboratories.

We tested for the presence of six different types of microbe: *Escherichia coli*, *Listeria monocytogenes*, plus four types of bacteria that cause food poisoning: *Staphylococcus aureus*, *Salmonella*, *Clostridium perfringens* (in beef only) and *Campylobacter* (in chicken only). This gave an indication of overall food quality. A standard plate count was used to measure the total amount of bacteria present.

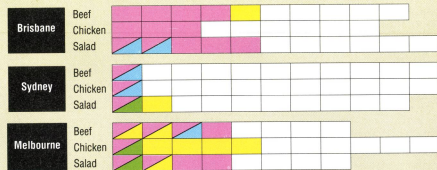


Figure 1

The above graphs show the total number of sandwiches of each filling type tested from each city. The number of coloured spaces along the bar represents the total number of poor-quality sandwiches. Each colour indicates the number of sandwiches deemed to be poor because of the presence of particular bacteria or a high standard plate count. Some sandwiches had more than one problem — indicated by the presence of more than one colour in a box.

Standard plate count (SPC) too high
A standard plate count indiscriminately counts the number of both good and bad bacteria. A high SPC means the sandwich has reached the end of its acceptable shelf-life and is close to going off. This could be due to being stored for too long (time abuse), at too high a temperature (temperature abuse), use of ingredients with a high SPC or a combination of the above reasons.

In consultation with microbiologists, and to take into account the naturally prolific bacterial levels in salads, we considered a sandwich with more than 10 million bacteria per gram of sandwich to be of poor quality.

Staphylococcus aureus too high
Food-poisoning *S. aureus* is found in the nose and throat of some people and can be transferred to food by sneezing, coughing and touching the mouth or nose during sandwich preparation. So a high level of *S. aureus* is an indication of poor hygienic practices. It can cause nausea, vomiting, stomach pain and diarrhoea. Food poisoning occurs within one to seven hours and it takes one to two days to recover.

In this test a sandwich with more than 1000 *S. aureus* per gram of sandwich was considered to be of poor quality.

E. coli too high
Its presence indicates probable faecal contamination through poor hygiene — not washing your hands after going to the toilet. *E. coli* is normally found in the animal and human gut, and if found in food it could indicate the presence of other intestinal bacteria, including *Salmonella*. In this test a sandwich with more than 10 *E. coli* per gram of sandwich was considered to be of poor quality.

Listeria monocytogenes found
L. monocytogenes contamination could have come from the ingredients, or from the site where the sandwich was made, stored or sold. Not only is *L. monocytogenes* of serious concern to pregnant women (since it can cause miscarriages), its toxins can also cause encephalitis and septicaemia. Not all people are susceptible to the micro-organism, but the consequences are serious so sandwiches were deemed poor-quality if any amount of *L. monocytogenes* was detected.

Sandwiches having a combination of *E. coli* or *S. aureus* together with a high SPC were considered to be of poor quality with slightly lower levels of the bacteria.

WHAT'S POISONING YOUR SANDWICH?

Food poisoning is caused by micro-organisms such as moulds, bacteria and viruses. Symptoms of food poisoning can occur in two hours after eating contaminated food or can take as long as several days to appear. They can range from mild nausea to vomiting, abdominal cramps, diarrhoea, fever and even death. The very young and elderly, and other people with weak immune systems, are most easily affected.

■ The most common micro-organisms that induce food poisoning are **bacteria**. Most are harmless — in fact many are beneficial — but there are a few that can cause illness. These are called pathogens and they're transmitted to food by people, soil, dust and pests.

Pathogens generally won't alter the appearance, taste or smell of food. On the other hand, micro-organisms responsible

for food spoilage cause an obvious change to the way food looks, tastes and smells. This is good from our point of view, as if the spoilage organisms that alert us not to eat the food have had time to grow, chances are so have any invisible pathogens that might be there.

■ **Moulds** that cause food poisoning produce toxins and can be extremely dangerous. Mould food poisoning is very rare and can easily be avoided by proper storage and adherence to use-by dates.

■ **Viruses** can't grow in food but you can catch them from food. Disease-causing viruses are usually passed on to food from human waste, via hands or insects and pests. Only a small number is required in food to cause a severe infection.

TOO MANY COOKS

At present, there is no national food hygiene law, but you are covered by state and territory laws. State laws are called the Food Act, Health Act (Western Australia) or Public Health Act (Tasmania). Unfortunately, there are considerable differences between the various state laws. Some have not reviewed their regulations for some time and have failed to fill the gap left by expired laws. For instance, Victoria has no current food hygiene law at all.

To further complicate matters, under the state acts local authorities impose their own regulations covering the construction and fitout of premises and equipment used in food storage, handling and processing. Some states don't even require registration of food premises — widely regarded as one strategy to regulate food hygiene. Others don't have legislation for important considerations such as storage temperatures for perishable foods, so they can't take action against retailers for poor storage.

It's up to local government authorities or health department workers to administer and enforce the state law, but each state and local government organisation differs in its training and vigilance.

There are simply too many government bodies designing, implementing and enforcing state food laws. It's not surprising there are lots of guidelines, legislative interpretations and levels of enforcement — some of which may put consumers at risk.

The National Food Authority hopes to disentangle some of the complications facing our current system of food regulation and nationally elevate our food standards with uniform legislation that will replace the existing state laws. If successful, the national legislation should encompass the latest international scientific and policy developments and ensure all states and territories have the same legislative standards — good news for the consumer!

Of some concern, though, is one proposal for industry self-regulation. CHOICE believes there are grave limitations to the effectiveness of a voluntary code — businesses either follow it or they don't. We would prefer to see a mandatory code enforceable by law with substantial fines and penalties for abuses. However, at the time of writing the proposal is still at discussion stage, so potential problems may be ironed out.



Not enough data

Australian states and territories urgently need to review the way they collect data on the prevalence of different types of food poisoning and develop strategies for reducing their incidence. A number of improvements could be made to data collection, including mandatory reporting by medical personnel. At present doctors are obliged to report certain types of food poisoning but the types that should be reported differ in each state, doctors may not identify the symptoms or recommend a pathology test, and sufferers may not even visit a doctor.

To overcome some of these problems, both the public and doctors need to be made more aware of the importance of reporting food poisoning cases. Initial programs could focus on some of the worst microbiological offenders, such as *Salmonella* and *Campylobacter*, so common sources and trends can be identified.

Even though we don't have adequate systems of data collection at present, it is still important to notify local area health authorities if you suspect a case of food poisoning. Call your state or council health service (listed in the phone book) if you need to report a food poisoning case.

HEALTHY HOME-MADE SANDWICHES

If we've put you off buying pre-packaged sandwiches, you can always make your own. Here's how to ensure you follow good hygiene and storage practices at home.

Basic hygiene

Bacteria can enter your house on shoes, clothing, hair or by being blown through open doors and windows. You can guard against contamination by regular hand washing, and regular and thorough cleaning of benchtops where you prepare food.

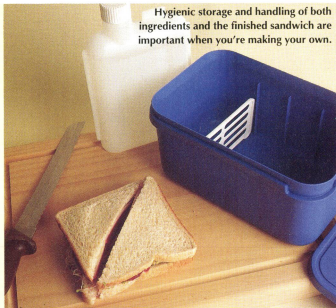
Mice, flies and cockroaches can carry disease organisms to food preparation surfaces. They can be minimised by using flyscreens, making your house inaccessible to pests, and by properly removing and storing all garbage.

Most food poisoning occurs when food is cooked too far in advance of being eaten or foods to be stored for future use are not cooled fast enough. Cooked meat, for instance, provides a clean slate that bacteria from raw vegetables or meat can invade. To prevent the growth or spread of bacteria, food should be properly cooked and stored at less than 4°C; cooked and uncooked foods should be kept apart.

Storage

Temperatures between 4°C and 60°C allow the growth of food-poisoning bacteria and represent a danger zone. Food should never remain in this temperature range for any length of time; cooked food should be kept hot at more than 60°C or rapidly cooled to 4°C for storage. This means your fridge needs to operate at less than 4°C; check it regularly.

To ensure sandwiches don't represent a health hazard to your family, and to keep them out of this dangerous temperature range, it would be a good idea to store school or work lunches in an insulated cooled lunchbox. Alternatively, you could pack a frozen fruit drink in the lunchbox or buy one that has a plastic container in which to freeze a drink.



Hygienic storage and handling of both ingredients and the finished sandwich are important when you're making your own.

Beware of some fillings

Some foods are particularly hazardous because they provide the right conditions to help poisonous bacteria grow. High-protein foods such as meat, poultry, fish and cheese provide a rich source of nutrients for bacteria. So it's particularly important that you store these foods properly if you hope to use them on your sandwiches. Once made, make sure the sandwiches are properly refrigerated; the same goes for sandwiches with other fillings.

Some fillings are more hazardous than others but it doesn't matter what sandwich fillings you use — all will have some bacteria present. If stored incorrectly, levels of spoilage and any food-poisoning bacteria present will rise and could lead to sickness.

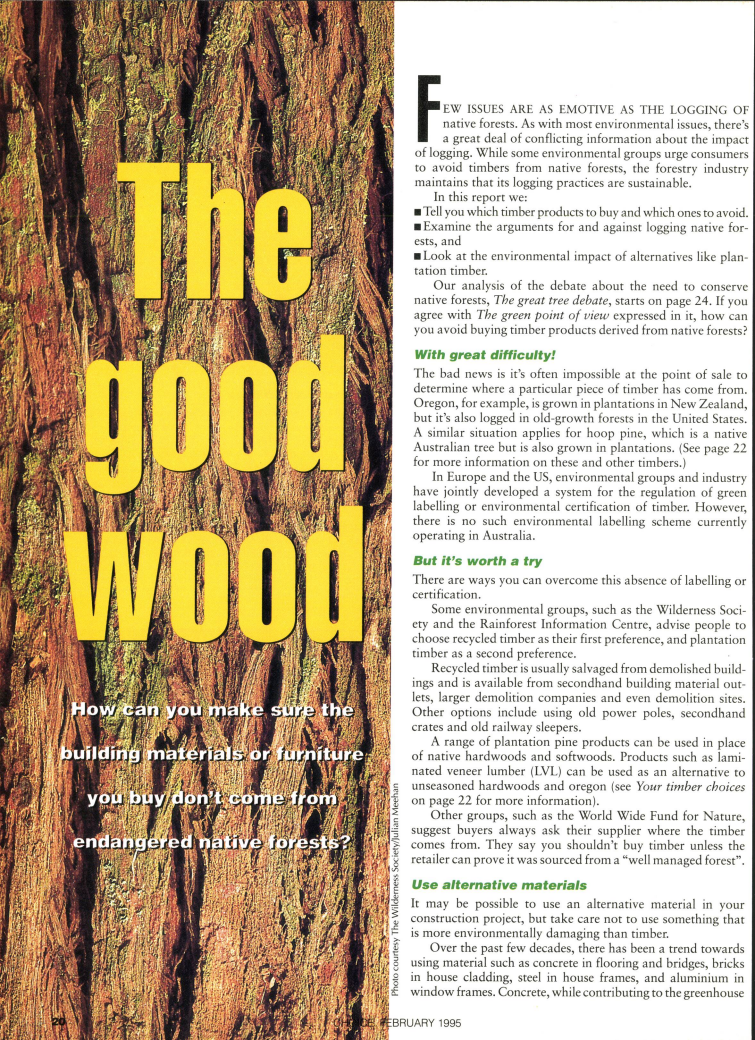
WHAT TO LOOK FOR IN A GOOD SANDWICH BAR

If you've been turned off the idea of buying pre-packaged sandwiches but don't have time to make your own lunch, you may want to visit a take-away sandwich bar. But what makes a hygienic sandwich bar? The key things to look for are:

- Raw and cooked food should be kept apart. Make sure cooked meats and salads aren't touching each other.
- Personal hygiene is important. Food preparers should be using barriers such as gloves or tongs when directly handling food; their hands and nails should be clean, cuts should be covered by waterproof dressings, hair should be tied back or in a clean cap, and they shouldn't also be handling money.
- Gloves aren't necessarily an indication of good hygiene — it all depends on what you do when you have them on. Look out for knives and utensils being wiped on a dirty cloth — hygiene regulations don't always stop this type of practice.
- Another sign of good food hygiene is when sandwich makers use different tongs for each sandwich filling. Even if you purchase what you believe to be a 'safe' sandwich filling, if the sandwich-maker is using one set of tongs for all fillings, you could be buying a cocktail of pathogens.
- Eat your take-away sandwich straightaway or keep it refrigerated until you do.



There are things to look out for to help you spot a hygienic sandwich bar.



The good wood

How can you make sure the building materials or furniture you buy don't come from endangered native forests?

FEW ISSUES ARE AS EMOTIVE AS THE LOGGING OF native forests. As with most environmental issues, there's a great deal of conflicting information about the impact of logging. While some environmental groups urge consumers to avoid timbers from native forests, the forestry industry maintains that its logging practices are sustainable.

In this report we:

- Tell you which timber products to buy and which ones to avoid.
- Examine the arguments for and against logging native forests, and
- Look at the environmental impact of alternatives like plantation timber.

Our analysis of the debate about the need to conserve native forests, *The great tree debate*, starts on page 24. If you agree with *The green point of view* expressed in it, how can you avoid buying timber products derived from native forests?

With great difficulty!

The bad news is it's often impossible at the point of sale to determine where a particular piece of timber has come from. Oregon, for example, is grown in plantations in New Zealand, but it's also logged in old-growth forests in the United States. A similar situation applies for hoop pine, which is a native Australian tree but is also grown in plantations. (See page 22 for more information on these and other timbers.)

In Europe and the US, environmental groups and industry have jointly developed a system for the regulation of green labelling or environmental certification of timber. However, there is no such environmental labelling scheme currently operating in Australia.

But it's worth a try

There are ways you can overcome this absence of labelling or certification.

Some environmental groups, such as the Wilderness Society and the Rainforest Information Centre, advise people to choose recycled timber as their first preference, and plantation timber as a second preference.

Recycled timber is usually salvaged from demolished buildings and is available from secondhand building material outlets, larger demolition companies and even demolition sites. Other options include using old power poles, secondhand crates and old railway sleepers.

A range of plantation pine products can be used in place of native hardwoods and softwoods. Products such as laminated veneer lumber (LVL) can be used as an alternative to unseasoned hardwoods and oregon (see *Your timber choices* on page 22 for more information).

Other groups, such as the World Wide Fund for Nature, suggest buyers always ask their supplier where the timber comes from. They say you shouldn't buy timber unless the retailer can prove it was sourced from a "well managed forest".

Use alternative materials

It may be possible to use an alternative material in your construction project, but take care not to use something that is more environmentally damaging than timber.

Over the past few decades, there has been a trend towards using material such as concrete in flooring and bridges, bricks in house cladding, steel in house frames, and aluminium in window frames. Concrete, while contributing to the greenhouse



The Tarkine, in Tasmania's north-west, is the largest tract of rainforest in the southern hemisphere. According to the Wilderness Society, it's currently threatened by woodchipping.

Photo courtesy The Wilderness Society/Julian Meehan

effect during its manufacture, is acceptable because of its durability. Aluminium, however, should be used as little as possible, as its production is a highly polluting and energy-intensive process.

Steel can be used as a substitute for hardwood and has the advantage of quick and accurate construction. It's also reusable, but the production of steel is energy-intensive, producing large amounts of carbon dioxide.

Insist on good wood

In many cases, people leave the decision of what timber to use to their builder. This is especially true for hidden structures such as house frames. Make a conscious decision about the timber used in

your project, and take steps to make sure your instructions are carried out.

When specifying the type of timber you want to use, make sure you go further than just specifying not to use native forest timbers. Be sure the timber you specify is available or builders will either ignore your instructions or ask the architect to locate the product, which may be difficult and bump up the cost of the project.

Use timber efficiently

Efficient use of timber means fewer trees need to be cut down. Here are a few pointers for the efficient use of timber from the *Rainforest Information Centre's Good Wood Guide*:

- Ask for the lowest-grade and smallest-size pieces of timber appropriate for the job. A common but wasteful practice is to order full lengths and then cut them up into small pieces.
- Don't throw out offcuts; put them aside and use them on the next job.
- Don't ask for blemish-free timber ('clear grade') or stringent colour matching, as this leads to waste.
- Try furniture made from knotty or 'feature-grade' timber as it will be unusual and visually interesting, as well as cheap.
- Use joined timbers whenever possible — timber can be joined on its ends by finger joints and metal nail plates or on its width by glue laminating.

RECYCLED TIMBER BRINGS SAVINGS

Ron and Virginia Quinn of Clovelly, NSW, estimate they saved \$10,000 by using recycled timber when they restored their weatherboard cottage.

Most of the recycled timber was salvaged from an old house they bought for \$700. It was used in everything from relining and structural work to making cupboards. The Quinns' extension work included two bathrooms, a kitchen, a third bedroom and car port. Salvaged doors and window frames were used throughout, and were matched to the era of their house. They used secondhand weatherboard to reskin the house.

Even the retaining walls in the garden were made from secondhand railway sleepers. The total cost of recycled timber was \$1000, while new timber — mainly used for the floor joists — cost them \$1500.

"It was so much cheaper to use recycled timber; new timber is so expensive," says Virginia. "We're environmentally oriented, so it also suits our philosophy as consumers."

While money was saved on buying the wood, there was often "lots of extra work" finding the right-sized timber and preparing it.

The work was done by Ron and his father, who is a builder. Virginia doubts that many other builders would be prepared to undertake this kind of project.

"You need a very special builder to do this kind of work."



Your timber choices

The following information is supplied by the Wilderness Society, the Rainforest Information Centre and the Good Wood Advisory Centre. The description of each timber supplements the diagram and table opposite. Use both to decide what plantation timber or pine products are most suitable for the job you want to do.

Cypress macrocarpa

Cypress macrocarpa is obtained from farm windbreaks planted around 70 to 100 years ago. There is a small number of sawmills in Victoria milling it from farms. It is useful as an oregon substitute and is around two-thirds the price of oregon.

Eucalypts

At present most eucalypt plantation timber is not mature enough to be used for sawn timber, though species such as blackbutt, flooded gum, blue-leaved stringy bark, silvertop stringy bark and Sydney bluegum are currently being grown.

Fibreboard

This is manufactured from compressed wood fibres. Medium-density fibreboard (MDF) is usually manufactured from plantation pine. However, when manufactured in Australia, thinner-sheet hardboards like Masonite are usually made from native forest timber. The Wilderness Society recommends you don't use it.

Glue-laminated radiata pine

Also known as 'glulam', this is manufactured from seasoned pine structural timbers which are joined face-to-face with glue under pressure. It can be used anywhere long span lengths are required such as roof beams and rafters.

Hoop pine

Hoop pine (*Araucaria*) is a tropical timber grown successfully on plantations around Australia. It is available as plywood, mouldings, sawn timber and slabs. Buy small boards (15 x 2.5 cm) as larger ones may have been logged from rainforest areas. It can be used in very similar applications to radiata pine.

Laminated veneer lumber (LVL)

LVL is a superior alternative to commonly used unseasoned hardwoods and oregon. It's manufactured from radiata pine veneers which are seasoned and laminated together with glue under heat and pressure. It is strong and can achieve

large spans; it's cost-competitive compared to 'green' hardwood and widely available.

Poplar

Poplar is grown mainly in plantations in NSW and New Zealand. It is an attractive white timber with a fine grain, and can be stained to any shade; it's mainly used for panelling.

Plywood

Plywood consists of an odd number of thin sheets or strips of wood glued together, with the grains of alternate layers usually at right angles. In Australia, it's manufactured from plantation pine. However, most imported plywood is manufactured from tropical rainforest timber, so try not to use it. It's used for building and cabinetwork.

Radiata pine

Radiata pine (*Pinus radiata*) is the most common type of plantation timber on the Australian market. If used outside, it should be treated (see *Treated pine* below). Untreated pine is only suitable for inside use, including house frames.

Slash pine

Slash pine (*Pinus elliottii*) is grown on plantations in south-east Queensland. It is available as a high-quality, smooth-surfaced face veneer. It is cheaper than imported rainforest veneers and equal in strength, hardness and appearance. It can be used in very similar applications to radiata pine.

Treated pine

There are currently two main alternatives for treating pine against rot (fungus) and insects: copper chrome arsenic (CCA) and light organic solvent preservation (LOSP). Both treatments may create some pollution in their manufacture or disposal, but the effect is considered by environmental groups to be significantly less than using native forest hardwoods. Plantation-grown hardwood timbers are being developed, but are at present available in limited quantities.

TIMBERS TO AVOID

The Wilderness Society recommends that the following native timbers should not be used for building purposes or furniture. They are mostly sourced from old-growth forests, wilderness or rainforests.

Alpine ash	Manna gum
Bean (black, red, salmon)	Marri
Beech	Messmate
Blackwood	Mountain ash
Box-ironbark	NSW teak
Brushbox	Quandong
Bunya pine	Queensland maple
Canary ash	River red gum
Celery top pine	Red cedar
Crows ash	Red satinay
Cypress pine	Rosewood
Ebony (black, grey)	Sassafras
Grey gum	Satin box
Huon pine	Shining gum
Ironbark	Silky oak*
Jarrah	Silver wattle
Johnson River hardwood	Tasmanian oak
Karri	Tasmanian myrtle
Kauri pine	Victorian ash
King William pine	Walnut (black, Queensland, yellow)
Mallee timbers	

The following imported timbers are usually obtained from endangered forests in other countries and should also be avoided.

Batu	Merbau
Californian redwood	Mersawa
Douglas fir (oregon)**	Narra
Iroko	Nyatoth
Jetutong	Pacific maple
Kapur	Padauk
Kauri	Philippine mahogany
Kempas	Ramin
Keruing	Sapele
Lauan	Teak
Mengkulang	Tulip wood
Meranti	Western red cedar

* While silky oak is sourced from native forests, it also comes from other sources such as urban forests, parks and gardens.

** Douglas fir (oregon) imported from the US or Canada is likely to come from an old-growth forest. However, Douglas fir from New Zealand comes entirely from plantations, and is OK to use.

Cut-away perspective view of a house

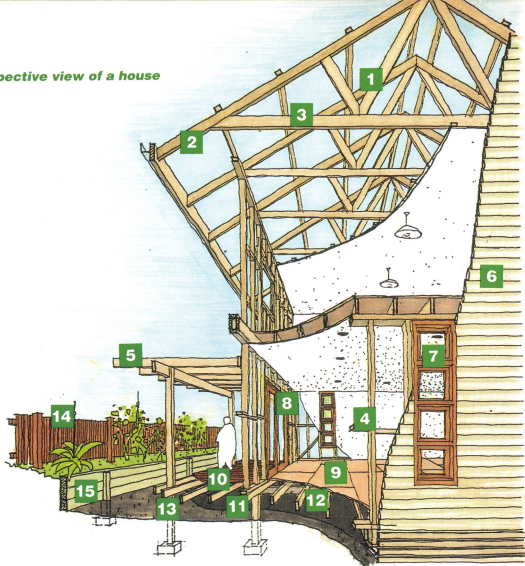


Illustration courtesy The Wildernes Society/Six Degrees

Item	Commonly used material	Recommended material*	Comments	Availability
1	Roof truss	Radiata pine, oregon	Economical and requires less labour	Truss manufacturers
2	Rafters	Australian hardwood	Radiata pine, LVL (B)	LVL has a high strength to weight ratio
3	Ceiling joists	Australian hardwood, oregon	Radiata pine, LVL (B)	LVL can support longer spans
4	Wall frame	Australian hardwood, radiata pine	Radiata pine	Pine widely considered cheapest and easy to use
5	Pergolas and gazebos	Treated pine, cypress pine	Treated pine, recycled timber	Treated pine is cost-competitive
6	Wall cladding	Western red cedar, oregon, hardwood	Treated pine cladding or boards	Pine is cost-competitive
7	Window and door frames	Western red cedar, meranti, merbau	Treated pine, hoop pine (<i>Araucaria</i>)	Both widely available
8	Skirting and architraves	Australian hardwood, meranti, MDF (A)	MDF, clear pine, radiata pine	Use clear pine for staining
9	Flooring	Australian hardwood, particleboard, pine	Particleboard, pine boards, concrete slab	Concrete provides thermal mass
10	External decking	Merbau, jarrah, cypress pine	Treated pine, recycled hardwood	Explore the recycled timber option
11	Joists	Australian hardwood	LVL (B)	Larger spans and treated for rot resistance
12	Bearers	Australian hardwood	LVL (B)	Larger spans and treated for rot resistance
13	Stumps	Cypress pine, red gum	Concrete	Concrete stumps durable and industry standard
14	Fences	Australian hardwood	Recycled hardwood, treated pine	Explore the recycled timber option
15	Landscaping	Australian hardwood, treated pine	Recycled hardwood, treated pine	Explore the recycled timber option

* Consult *Your timber choices* (opposite) for information about these and other materials which can be substitutes for endangered timber species.

(A) MDF stands for medium-density fibreboard — see left for details.
(B) LVL stands for laminated veneer lumber — see left for details.

Source: Wilderness Society

The great tree debate

Is it really possible for native forest logging to be sustainable, and what are the alternatives?

The green point of view

According to conservation groups the current system of industrial logging is causing serious environmental problems, including massive species extinction, soil degradation, pollution of streams and rivers, and disruption to both local and global climate patterns.

Central to their argument is the idea of biological diversity, also known as biodiversity. Simply put, biodiversity describes the variety of life on earth. It encompasses the different plants, animals and micro-organisms, the genes they contain and the ecosystems which contain them. Biodiversity is important to maintaining the fundamental processes on which human life depends.

These processes are dependent on biological systems, where plants and animals, through metabolism and interaction, take non-living substances such as the sun's radiation, soil, air and water, and convert them into forms of energy and nutrients humans can use.

Since European settlement of Australia, nearly 90% of temperate woodlands

and 50% of rainforests have been cleared for agricultural use and for forestry. As a result of this clearing more than 50% of agricultural land now needs restoration because of salination, waterlogging, soil erosion and other degradation.

This clearing has also already taken its toll on Australia's biodiversity. One hundred plant species, 17 mammals and three bird species are known to have become extinct since European settlement.

The greenhouse effect has also figured in the logging debate. Since the 1800s, our increasing use of fossil fuels such as petrol, coal, oil and gas has meant an increase of carbon dioxide (CO₂) in the atmosphere. Scientists believe the resulting greenhouse effect will cause major changes in our climate and sea levels.

Environmentalists say the greenhouse effect is being accelerated by the clearing of forests in many parts of the world. Trees play a large part in absorbing excess carbon dioxide through the process of photosynthesis. If a forest is totally cleared and used for cattle graz-

ing, the ability of the same area of land to absorb CO₂ is severely reduced.

Opinions do differ

Some parts of the environmental movement have slightly different opinions about whether native forest logging should be stopped completely.

For example, the Wilderness Society believes it should be. Forestry consultant Alister Graham explains: "Over the past 10 years, the environmental movement has moved from the position of encouraging properly managed native forests for wood production to basically arguing that an ecologically sustainable wood supply from native forests is not possible at an industrial scale. What's needed is a rapid transition to using plantations already established."

While agreeing that current logging practices are unsustainable, Michael Rae, a senior policy officer with the World Wide Fund For Nature, says his organisation has a slightly different approach. "We don't take the view that there is no place for native timber logging in Australia, but there has to be independent third-party assessment of logging practices, including protection of areas of high conservation value, which is not happening now."

The industry point of view

The forestry industry maintains that native forest logging is carried out using sustainable management practices, and that the use of those methods means

OUR FORESTS



Forty-year-old flooded gum, Wang Wauk State Forest

Photo courtesy State Forests of NSW

There are about 41 million hectares of native forests in Australia, distributed over four major land tenures: about 30% are state forests, managed for multiple use, including timber production; 25% are crown land of low timber production capacity, mostly leased for cattle grazing; 16% are permanently set aside in National Parks and other conservation reserves where logging is prohibited; and 28% are privately owned forests.

Over seven million hectares (about 60%) of state forests are available for logging and regeneration. The rest is either inaccessible and so too expensive to log, and/or set aside for environmental protection.

These forests are also divided on the basis of their condition. Forests that haven't been logged are known as old-growth forests, while those that have been logged and then regenerated are known as regrowth forests. On the opposite end of the scale, plantation forests are the result of land clearing and the direct planting of native or exotic tree seedlings.

native forests can continue to be logged in perpetuity. These sustainable management practices include:

- Not logging forests along streams and in areas that are important to wildlife.
- Logging on a long rotation period; waiting for up to 80 years before reharvesting an area.
- Enforcing codes of practice to control the short-term damage caused by logging.
- Protecting certain trees for animals to shelter or nest.
- Ensuring regeneration by retaining seed trees to seed the new forest, aerial seeding or planting seedlings.

The government's point of view

State and territory governments have primary responsibility for forest management, while the Commonwealth Government is responsible for co-ordinating a national approach to both environmental and industry/development issues.

All state and territory governments, with the exception of Tasmania, are signatories to the National Forest Policy Statement. Tasmania does, however, endorse the principles of the National Forest Industry Strategy.

The overall aim of the National Forest Policy Statement is to develop a "strategy for the ecologically sustainable management of Australia's forests ... in order to achieve the full range of benefits that forests can provide now and in the future."

All forest agencies say they have adopted the sustainable-yield management principle for all forests in wood-production areas. Adherence to this principle should mean logging is carried out so that a continuing supply of timber can be maintained in perpetuity.

According to Brett Shields, a community liaison officer with NSW State Forests, these agencies see themselves as professional forest managers. "There have been problems with logging, but forest management has changed in the past 20 years," he says. "Research and planning has improved forest management to beyond current public expectations. We need to tell the public that forests are being ecologically sustained."

The plantation alternative

The forestry industry and conservation groups believe plantations will increasingly play an important part in wood production. While some conservation groups see plantations as a substitute for native forests, industry sees them as a complement.

At present about 90% of Australia's plantations are softwood, while 10% are hardwood. More plantation softwood timber will become available as maturing plantations are harvested. It's also imported from other countries such as New Zealand.

Judy Clarke, an economic consultant specialising in plantation wood process-

ing, has recently commenced Commonwealth Government funded research examining Australia's plantation resources. She believes the forest debate could be substantially over by the turn of the century, with a "favourable outcome for native forest conservation".

While plantations sound like a promising source of sustainable timber, a recent Greenpeace publication, *The Plantation Effect*, argues current plantation practices are unsustainable. It says problems arise because plantations are usually made up of a single species (monoculture), which is often introduced, such as radiata pine. As a result, plantations don't provide habitat to the same range of plants and animals as native forests, so they limit biodiversity.

According to the Greenpeace report, large-scale monocultures tend to be more vulnerable to pest and disease attack, and the maintenance and harvesting of these plantations is thought to have adverse effects on soil and water quality. Greenpeace suggests alternative plantation management practices, such as a mix of native species, which would maintain soil and water quality and actively protect biodiversity.

Environmental groups also argue that native forests shouldn't be cleared to make way for plantations and that they should be planted on degraded farmland. □

THE TIMBER INDUSTRY

With a yearly sales turnover of \$10 billion and employing 85,000 people, the wood and paper products industry is Australia's second-largest manufacturing industry.

Australians consumed 4.5 million cubic metres of timber in 1993/94. In that year Australia produced 77% of its own sawn timber needs, with native forests providing approximately 45% and the rest coming from softwood plantations. Our main imports are Douglas fir (oregon) from North America and radiata pine from New Zealand.

Commercial timber is divided into two broad categories: hardwood and softwood. These divisions don't have much relation to the actual softness or hardness of the timber.

Hardwoods are produced from broad-leaved trees, such as eucalypts, which produce seeds contained in an enclosed case or ovary. In Australia, most hardwood is obtained from native forests.

Softwoods are produced from coniferous or cone-bearing trees which have needle-like leaves and are mostly evergreen, like pines and firs: they usually have a large open grain. They are mostly sourced from plantations in Australia. Softwoods aren't as durable as hardwoods, but when treated with chemical preservatives they can be used in a wide range of applications.



Wood and paper products are a significant part of Australia's economy.

Photo courtesy The Wilderness Society/Julian Meehan



Consumer-in-law



Refunds – your consumer power

You have the right to ask for your money back if you buy a faulty product.

HOW MANY TIMES HAVE YOU wandered around the streets for a pleasant afternoon's shopping only to be confronted by 'No refunds given' signs — dozens, perhaps hundreds?

You'll be happy to know these warnings have no teeth. Traders who display "no refunds given" signs in their stores are in breach of the law and can incur fines under the Trade Practices Act of up to \$200,000.

"No responsibility for loss or damage", "Goods left for repair at your own risk" and "All care but no responsibility taken" signs are also misleading. It's illegal for sellers to write a clause into conditions of sale that exempts them from liability for product faults and defects. The protection offered by federal and

state laws can become a formidable force when used in any dispute you may have with a retailer or manufacturer.

Your contract with the trader

Every time you buy a product or service you enter into a legally binding contract. Obviously with a written contract it's easier to prove the terms and conditions, but most transactions constitute verbal contracts. A transaction must have three elements for it to be a legally binding contract — the offer, made when you decide to purchase and offer a price; an acceptance, when the seller accepts the price and terms; and a consideration, which is the value (usually money) given in return for goods or services. In the last case, if someone promises to do some-

thing for nothing they're making an agreement, not entering a legally binding contract.

How you are protected

Even after the contract has been signed or verbally agreed to, you still have rights under federal, state or territory government laws that can't be signed away.

Most traders are covered by the Commonwealth Government's 1974 Trade Practices Act, but this national law only covers companies; it doesn't apply to sole traders and partnerships. To fill this gap, the states have their own set of laws which tend to reflect the Trade Practices Act — commonly called Fair Trading Acts.

The implied contract terms

The Trade Practices Act and state acts ensure that your consumer rights aren't signed away. These consumer rights are collectively called the 'implied' contract or warranty terms and apply even to sale items. These implied warranty terms always exist, even if they are not explicitly included in the contract you have signed or verbally agreed to. They dictate that manufacturers, service providers and retailers have explicit trade obligations and consumers have implicit rights, including the right to redress if these obligations are breached.

Fit for the purpose

Most importantly, you have the right to be supplied with goods of 'merchantable' (reasonable) quality and fit for the purpose for which they were sold. For instance, a toaster should toast and a clock must keep time. If what you purchase fails to work properly or isn't of the standard you are reasonably entitled to expect, you can return it and request the seller to fix the item, replace it or refund its value. Your right to a refund or redress applies to normal purchases, sale items, gifts, goods on hire purchase, credit, lease or hire, but not to items or services purchased at an auction.

Goods must match description

Goods must also fit their trader's descriptions and must match a sample. For example, if you purchase a handbag de-

scribed as leather, only to discover it is vinyl, you have the right to return it. If you bought something on the basis of a sample, you should expect the same quality and standard from your delivered item. This maxim also applies to goods purchased as a result of a demonstration, such as a food processor.

Consequential loss

In addition, you may have the right to monetary compensation from the manufacturer or importer for any loss suffered due to a faulty product. This is known as consequential loss. For example, you may be able to claim laundromat expenses if you've purchased a washing machine that doesn't work.

The duty of care

Traders and service providers also have a duty to avoid causing injury to consumers — a 'duty of care'. If someone is injured by a supplier's goods or services, they can take legal action against the supplier to obtain compensation for any loss or damage caused by the goods or services. Since the introduction in 1992 of new laws about unsafe goods, consumers no longer have to prove the manufacturer was negligent; they only have to establish that the goods were defective, so it's now much easier to claim damages.

Consumers are also entitled to assume a service will be carried out with the same due care and skill as would be applied by any competent member of a trade or profession and that materials supplied will be fit for the purpose intended. Services should be provided as they were described or as you requested them. For example, if you have kitchen cupboards built and installed by a qualified carpenter, you should expect them to be built to the standard normally provided by a qualified tradesperson. If the cupboards were built by an odd-jobs person, however, this same trades standard could not be applied.

If a service doesn't meet the standards prescribed by law, you can also claim the cost of having it performed again and the costs of new materials. If necessary, the costs involved in starting the job again — such as pulling up concrete that has subsided and cracked be-

HEATED

On reading the June 1994 CHOICE article on fan heaters, *Controlling the hot air*, Roy Caddy went to K Mart and bought a Homemaker 2400. In September it stopped working and he asked for a replacement.

While K Mart was quite happy to refund, repair or replace the product, it had run out of stock. According to Mr Caddy, when K Mart approached the manufacturer about a replacement they said they would only replace the heater if K Mart purchased additional stock. Since winter was over, K Mart decided against a bulk order, but offered Mr Caddy a refund.

Mr Caddy took the refund but would have preferred a replacement heater. He has lost the use of the heater and expects to have to pay more for the same or a similar product next year because of inflation. While he commended the prompt response and consideration of K Mart, he feels the manufacturer side-stepped its obligation to a consumer — and K Mart didn't pursue the matter because he accepted a refund from the store.

When we investigated the issue, we found that consumers have the right to get their money back on a product that doesn't work as it should, but they can't demand repair or replacement. However, like many large retailers that value customer goodwill, K Mart's policy is to offer "whatever the consumer wants". Manufacturers also have obligations to consumers, but they can choose what kind of recompense they offer — repair, credit note or refund.

cause it was initially laid incorrectly — and additional or consequential losses arising from the poor service can also be claimed.

Expired warranties

Even if manufacturer or seller warranties have expired, you still have rights under the Trade Practices Act and state and territory laws. If goods are faulty, for instance, the manufacturer may still be liable after the warranty has expired, and the period in which you can make a claim can't be limited by a warranty. However, if goods are damaged from normal wear and tear there isn't cause for complaint. Establishing that there's a genuine fault rather than simply a breakdown from usage can be tricky.

What are your compensation options?

Upon discovering you've purchased faulty goods, you have three options:

- If the defect is major, you're entitled to a full refund or a replacement.
- If the defect is minor, it may be more convenient to have it repaired at the seller's expense.
- When a defect doesn't become apparent for some time, the seller may insist

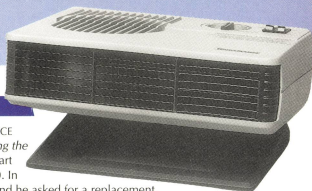
the item is repaired rather than replaced; if this proves unsatisfactory after a reasonable period, you can insist on a replacement or refund. A refund may be reduced in relation to how long you've been using the product.

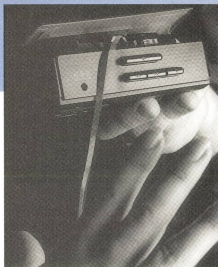
If you have paid in cash, you can insist on a cash return, but if you paid by credit or on account you can only ask to be recredited.

How to get a refund

If you've bought a faulty product, it's important to return it as soon as possible even though there's normally no legal time limit. The longer you wait, the harder it will be to prove the defect was present when you purchased the product. Don't be fobbed off if the seller says you have to take the product back to the manufacturer — it's the seller's responsibility to return goods, not yours.

When you return the item, you must produce proof of purchase, such as a receipt or credit card slip. If there is a dispute, ask to speak to someone in charge. If you fail to find someone in authority write a letter instead, explaining the problem rationally, succinctly and clearly. If you choose to leave the goods in the store, make sure you have





some evidence (such as a receipt) that you returned them.

If the retailer refuses to come to some sort of agreement to your satisfaction, you can approach the manufacturer, regardless of whether the goods were given to you, you originally purchased them or bought them secondhand. However, the product you are returning to the manufacturer must have been purchased through a retailer and it must be something normally acquired for household or personal use.

Consumer affairs departments

If you're still dissatisfied, the next step is to seek information from and/or lodge a complaint with your state consumer affairs office.

A drawback is that neither the Trade Practices Commission nor consumer affairs offices can invoke proceedings on your behalf — you have to take legal action if you want your rights enforced. The Trade Practices Commission can only act where companies make false or misleading representations about warranty rights and contract terms, so it

recommends that you first approach your state consumer affairs office. After you lodge a complaint with a consumer affairs office, it should act as mediator in the dispute until an agreement is reached. If the retailer has committed an obvious breach of the law, it will also be liable to prosecution by the consumer affairs department.

Going to court

If you're still unhappy with the outcome after this negotiating process, you can always lodge a complaint at a Small Claims or Consumer Claims court or tribunal. Fees and claim limits are different in each state (see *Your local consumer court* below for details). If you hoped to claim more than the limit, you may decide to go for a smaller amount in a small claims court or try to recover the lot in the general court system. If the complaint is serious, the Trade Practices Commission recommends getting legal advice first.

There are also special tribunals or divisions of the courts where you can take a dispute. The best place to find out the most appropriate course to follow is your local magistrates court. NSW also has a small claims division of the local court system, which is an informal hearing where claims up to \$3000 can be determined.

Courts will tend to go in your favour if a contract is 'harsh'. That is, if it excludes consumer rights and remedies or has excessive penalties for minor breaches. □

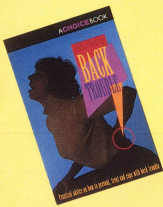
WISE SHOPPING

- Think about how you want the product to perform.
- Shop around for the best quality and price and, if necessary, get a written quote — particularly with repair, construction and maintenance work.
- Inspect goods carefully before purchase.
- If you're travelling overseas and want to use a product you've bought in Australia, make international warranties part of your shopping criteria.
- Make sure you really want the product before you place a deposit on it, and don't pay large deposits — retailers aren't obliged to give you your money back just because you change your mind.
- Ensure you completely understand any contract you have to sign, you're aware of any credit charges, and have traders' promises, including warranties, in writing.
- Never sign a contract that has blank spaces.
- While door-to-door sales can have a cooling-off period of 10 days in some states, telephone sales are binding — always get more information before you agree to buy something over the phone.
- Before you buy, ask for the shop's policy on refunds — it's not obliged by law to give you your money back for or exchange an unwanted gift or an item you decide you no longer like.
- Keep all invoices, dockets, credit card receipts and cheque stubs — these could be needed as proof of purchase if you're seeking a refund or compensation.

Your local consumer court

State	Name of court/tribunal	Application fee	Maximum claims	Contact
ACT	Small Claims Court	\$29 (for claims up to \$2000) or \$72 (for claims from \$2000 to \$5000)	\$5000	(06) 267 2787
New South Wales	Consumer Claims and Building Disputes Tribunal	\$40 (\$5 pensioner concession) or \$100 (building disputes)	\$10,000 or \$25,000 for building disputes	(02) 895 2070
Northern Territory	Local Court (Small Claims Division)	nil (for claims less than \$100) or \$10-\$40 depending on amount claimed	\$5000	(089) 51 5709
Queensland	Small Claims Tribunal	\$11 (for claims less than \$500) or \$34.50 (for claims from \$500 to \$1500) or \$58 (for claims from \$1500 to \$5000)	\$5000	(07) 227 4578
South Australia	Small Claims Court	\$45	\$5000	(08) 226 1777
Tasmania	Magistrate's Court (Small Claims Division)	\$27.50	\$2000	(002) 33 3630
Victoria	Residential Tenancies and Small Claims Division	\$10	\$5000	(03) 628 9830
Western Australia	Small Claims Tribunal	\$21 (\$7 concession)	\$6000	(09) 426 8700

CHOICE BOOKS



Understanding Back Trouble

Understanding Back Trouble offers clear advice on how to cope when you have back problems. It covers many topics including: how your back works and what can go wrong; how to cope with sudden back pain; when to call your doctor; examinations and tests; orthodox and alternative treatments; how to minimise back pain; and exercises. *Understanding Back Trouble* provides invaluable advice about developing and keeping a healthy back.

\$18 paperback 168 pp

Code: UBT



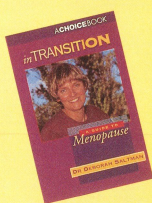
Keep Your Car Alive

An Easy Guide to Routine Care and Maintenance

The key to having a car that ages well is to prevent trouble before it happens. *Keep Your Car Alive* supplies all the information you need about routine maintenance to keep your vehicle in optimum condition. An extensive checklist will help all car owners — first-timers or old hands.

\$16 paperback 128 pp

Code: KYCA



In Transition

A Guide to Menopause

In Transition covers the issues surrounding menopause in a clear, easy to understand, non-patronising way. Topics include: your relationship with your doctor; HRT; osteoporosis; cancer; heart disease; incontinence and prolapse; and conventional and alternative strategies for dealing with problems which may arise.

\$17 paperback 184 pp

Code: IT

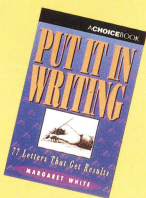


Facefacts

A Guide to Cosmetics, Skin and Hair Care
Beauty choices for the discerning cosmetics purchaser. *Facefacts* guides you through the thickets of advertising claims and distinguishes the hype from the hard facts, explaining phrases like 'hypoallergenic', 'comedogenic' and 'natural'. It looks at many issues, including testing on animals, how the sun damages your skin, and how best to protect it.

\$18 paperback 240 pp

Code: FF



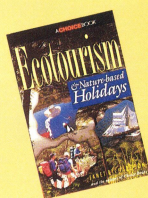
Put It In Writing

77 Letters That Get Results

We all know an effectively worded letter can get results, but quite often we give up before we start, because we don't know how to write the letter. This book contains 77 well-considered, cool and authoritative letters, written by a lawyer, which can be adapted to suit your situation.

\$16 paperback 168 pp

Code: PIW

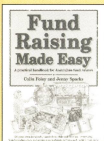


Ecotourism & Nature-Based Holidays

An insight into a new sort of holiday — ecotourism. Enjoy your surroundings while learning about them, and without creating havoc in the Australian environment. This guide gives you information about tour operators, resorts and other attractions.

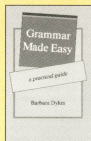
\$17 paperback 224 pp

Code: ENBH



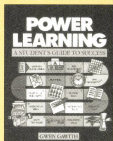
Fund Raising Made Easy

This book includes over 150 ideas to help you raise funds for your organisation. It contains information about legal requirements, special activities, group travel and other novel ideas.
\$17 paperback 184 pp Code: FRME



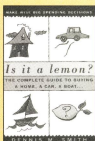
Grammar Made Easy

As the school year starts grammar comes to the forefront again. This is a book to help you improve your grammar or explain it to your child. Through a series of simple step-by-step exercises it looks at all the common mistakes, punctuation and parts of speech.
\$17 paperback 188 pp Code: GME



Power Learning

If you're a student, this very thorough, helpful book will help you identify your learning style and expand your repertoire of learning strategies.
\$14.50 paperback 135 pp Code: PL



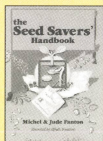
Is it a Lemon?

This book won't make you a home, car or boat expert — but it may stop you making a big mistake. It provides basic information about what to look for when buying one of these three 'big-ticket' items, and includes diagrams and checklists.
\$17 paperback 228 pp Code: IIAL



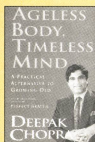
Earthworms in Australia

This book explains how earthworms can recycle our organic waste and produce nutrient-rich castings to improve your gardens and compost. It also offers practical guidance on earthworm farming.
\$15 paperback 110 pp Code: EIA



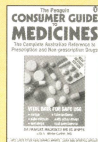
The Seed Savers' Handbook

How to protect our global food heritage — and eat it too. This is a guide to 117 vegetables and herbs, describing their cultivation, usage and how to save and store their seeds. Beautiful line drawings complement the clear text.
\$23 paperback 176 pp Code: SSH



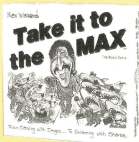
Ageless Body, Timeless Mind

Is aging inevitable? Drawing on his background in both Ayurvedic and western medicine, Dr Deepak Chopra examines this question by considering the interaction of mind and body processes. This book combines understandable theory, inspiring case studies and practical exercises.
\$20 paperback 342 pp Code: ABTM



The Penguin Consumer Guide to Medicines (3rd ed.)

The latest edition of this very successful and informative directory. A guide to over 600 generic-name drugs (over 4000 brand names), giving details on usage, effects, side-effects, warnings, possible interactions, and overdose symptoms and procedures.
\$30 paperback 572 pp Code: CGM2



Take it to the Max

Board games are social games, and this one is no exception. *Take it to the Max* requires players not only to answer general knowledge questions (about Australia) but also to answer dilemma questions as either Max Walker (who is one of the authors) or themselves. A lot of fun for teenagers and adults.
\$45 BOARDGAME Code: TITM

MOZZIE REPELLENTS: UPDATE

LAST MONTH WE BROUGHT YOU A full report on mosquito repellents, but a few products were available too late to make it into that issue. Since there were some well-known names among them — and it's still mozzie season — we tested them as soon as we could get hold of them to bring you this update.

The new AEROGARD pump spray didn't give protection for quite as long as its other AEROGARD stables: 3½ hours as opposed to 4½ to 5½. But of the newcomers, it and the SCRAM aerosol (which was effective for three hours) are the best. The BUGLESS repellents gave only one or two hours' protection, depending on the formulation.

Again, the products containing DEET worked better than so-called 'natural' repellents, but remember DEET is reasonably toxic — don't lather yourself in it, and be particularly careful when using a repellent containing it on children. Use a product with a low concentration of DEET (certainly less than 50%) that works well for a long time.

Last month's report discussed in detail the various chemicals used in repellents; check it out if you want to know more about any ingredients.

The only change to last month's Best Buys is the addition of the AEROGARD pump spray.

BEST BUYS

Aerosol	Cost per application
AEROGARD Low-irritant	10 cents
AEROGARD	10 cents
Lotion	
RID	5 cents
AEROGARD	5 cents
Pump spray	
AEROGARD	5 cents
OFF!SKINTASTIC	5 cents
Roll-on	
AEROGARD	10 cents
NO FRILLS	10 cents
Gel	
None	

1

Mosquito repellents

Product
(in order of average
working time)

Product	Type tested	Size	Manufacturer/distributor	Repellent
BUSHMAN	Gel	75 g	North Queensland Laboratories	80% DEET w/w
BUSHMAN	Gel with sunscreen	75 g	North Queensland Laboratories	80% DEET w/w
AEROGARD Low-irritant	Aerosol	150 g	Samuel Taylor	19% DEET, 4.35% DPI, 1% OBD w/w
AEROGARD	Aerosol	100 g	Samuel Taylor	19% DEET, 4.35% DPI, 1% OBD w/w
AEROGARD	Roll-on	50 mL	Samuel Taylor	11.47% DEET, 4.18% DPI, 2.77% OBD w/w
KOKODA	Lotion	125 mL	Furious	15% DEET, 3% DPI, 2% OBD w/w
NO FRILLS	Roll-on	50 mL	Franklins	11.47% DEET, 4.18% DPI, 2.77% OBD w/w
RID	Aerosol	100 g	Thorley Laboratories	10% DEET, 2% DPI, 1.5% OBD, 0.1% triclosan w/w
RID	Lotion	125 mL	Thorley Laboratories	16% DEET, 2% OBD, 1% DPI, 0.1% triclosan w/v
AEROGARD	Lotion	125 mL	Samuel Taylor	17% DEET, 4.95% DPI, 1.8% OBD w/v
BITEFREE	Aerosol	150 g	Pea-Beu Manufacturing Co	5.22% DEET, 1.1% OBD, 1.1% DPI w/w
BUSHMAN	Pump spray	500 mL	North Queensland Laboratories	33% DEET, 2.5% DPI, 2% OBD w/w
RID	Roll-on	60 mL	Thorley Laboratories	16% DEET, 2% OBD, 1% DPI, 0.1% triclosan w/v
BUSHMAN	Aerosol with sunscreen	150 g	North Queensland Laboratories	20% DEET, 1.1% OBD, 1.1% DPI w/w
SAVINGS	Aerosol	175 g	GJ Coles	3% DEET, 2.5% DPI, 2% OBD w/w
AEROGARD	Pump spray	135 mL	Samuel Taylor	11.5% DEET, 2.43% DPI, 1.8% OBD w/v
BI-LO	Roll-on	50 mL	Trend Laboratories	7% DEET, 2% OBD, 1% DPI, w/w
OFF!SKINTASTIC	Pump spray	125 mL	SC Johnson and Son	6.975% DEET w/v
OFF!SKINTASTIC	Lotion	125 mL	SC Johnson and Son	7.35% DEET w/v
SCRAM	Aerosol	125 g	David Grays	19% DEET, 4.5% DPI, 1% OBD w/w
BUGLESS	Pump spray	125 mL	Armour Holdings	2% citronella oil w/v
BUGLESS	Lotion with sunscreen	125 mL	Armour Holdings	1% citronella oil w/v
WALKABOUT	Gel	125 mL	Thursday Plantation	1.89% melaleuca, 0.945% lemon-scented tea tree oil, 2.835% citronella
BUG OFF	Pump spray	50 mL	Natural Oil Workers	23% eucalyptus, 23% citronella w/v
BEE NATURAL	Lotion	125 mL	M and C McDermid	Citronella, melaleuca oil (A)
BUGLESS	Cream	125 mL	Armour Holdings	2% citronella oil w/v
SANDY'S NATURAL	Pump spray	100 mL	Sandy's Natural Herbal Products	4% citronella, eucalyptus, rosemary w/v
ENVIRON	Roll-on	50 mL	Shop Direct	3% citronella, 2% melaleuca oil w/v
ENVIRON	Pump spray	100 mL	Shop Direct	3% citronella, 2% melaleuca w/v
WALKABOUT	Roll-on	50 mL	Thursday Plantation	Melaleuca, lemon-scented tea tree oil, citronella (A)

DEET N,N-diethyl-m-tolamide
DPI Di-n-propyl isocinchomeronate
OBD N-octyl bicycloheptene dicarboximide
OB N-octyl bicycloheptene

* Prices supplied by manufacturers/distributors in November and December 1994, unless noted otherwise.
** An application here equals covering two forearms.

(A) % not available.
(B) Average price when three samples were purchased.



1 Repellent/insecticide

The active ingredients we found in the repellents are discussed in detail in last month's report. As well as repellents, some products include insecticides (for a 'knock-down' effect) and other chemicals that make the repellents and insecticides more effective. Citronella is mainly included as a repellent but also has some effect as an insecticide.

Percentages are expressed as either weight-for-weight (w/w) or weight-per-volume (w/v).

2 Average working time

Assessments were made immediately after each repellent was applied to the forearms of our volunteers and then at hourly intervals until a confirmed bite was recorded. The BUSHMAN gel products were still working effectively past six hours.

Each repellent's effectiveness was assessed six times, each time also using a standard product for comparison. The constituents of the repellents don't change over their six tests, but external conditions may: the mosquitoes might be hungrier, for example. For each batch of tests, therefore, the average working time of the comparison product was adjusted to match its overall average, and the average working time of the repellent being tested was also adjusted accordingly.

This means that when we added the five new repellents to the first test, the overall average of the comparison product changed slightly, thus also changing — by only 0.1 hour — the average working times of all the repellents in our first test. Because we didn't think it was very realistic to talk in terms of six minutes' worth of protection, for last month's report we rounded the average times to the nearest half hour. The slight difference in average times caused by adding the five new products has meant some of the times for this month's report have had to be rounded down instead of up. This is why three of the repellents in this update (AEROGARD Low-irritant, roll-on and lotion) have a slightly lower average working time than last month.

The same variation in effective working time will apply in real life: if you're bushwalking in the heat you'll need to put repellent on more often than if you're lying in the backyard reading a book. Our testers tried to reproduce 'ideal' conditions for the products — they didn't exert themselves at all while the test was running.

Insecticide	Average working time (hours)	Average price (\$)*	Price per application (cents)**	Product (in order of average working time)
	> 6	9.95	20	BUSHMAN Gel
	> 6	10.95	20	BUSHMAN Gel/Sun
	5.5	4.00	10	AEROGARD Low-irritant
	5.5	3.30	10	AEROGARD Aerosol
	5	3.10	10	AEROGARD Roll-on
	5	6.50	10	KOKODA Lotion
	5	1.80	10	NO FRILLS Roll-on
% pyrethrum w/v	5	4.40	15	RID Aerosol
	5	4.40	5	RID Lotion
	4.5	4.00	5	AEROGARD Lotion
	4.5	3.05	5	BITEFREE Aerosol
% permethrin w/v	4.5	29.95	10	BUSHMAN Pump spray
	4.5	3.75	10	RID Roll-on
	4	9.95	20	BUSHMAN Aerosol/sun
% pyrethrins, 0.4% piperonyl butoxide w/v	4	3.00	5	SAVINGS Aerosol
	3.5	4.00	5	AEROGARD Pump spray
	3.5	1.70	5	BI-LO Roll-on
	3.5	4.00	5	OFFSKINTASTIC Spray
	3.5	4.00	5	OFFSKINTASTIC Lotion
	3	4.00	10	SCRAM Aerosol
% pyrethrins, 0.8% piperonyl butoxide w/v	2	3.75	5	BUGLESS Pump spray
% pyrethrins, 0.8% piperonyl butoxide w/v	2	6.65	5	BUGLESS Lotion/sun
	2	6.00	5	WALKABOUT Gel
% pyrethrins w/v	1.5	7.20 (B)	10	BUG OFF Pump spray
	1	6.00 (B)	10	BEE NATURAL Lotion
% pyrethrins, 0.8% piperonyl butoxide w/v	1	3.95	5	BUGLESS Cream
% pyrethrins w/v	1	6.10 (B)	10	SANDY'S NATURAL
% pyrethrins w/v	0.5	2.75	10	ENVIRON Roll-on
% pyrethrins w/v	0.5	3.85	5	ENVIRON Pump spray
	< 0.5	6.00	30	WALKABOUT Roll-on

Average working time rounded to nearest half an hour. Price per application rounded to nearest five cents.



Letters



Charities reporting

Congratulations on your article *Charities* (June 1994), which looked at a number of important issues currently being examined by the Industry Commission Inquiry into Charitable Organisations.

World Vision Australia, which did not feature in your list of nine larger charities, is Australia's largest overseas aid agency and one of the most publicly recognised. Last financial year, World Vision Australia had a revenue of \$87.4 million and is budgeting this year to receive \$95.3 million. The majority of this money is provided through the generosity of ordinary Australians, although a substantial proportion — \$20.4 million in 1993 — is provided by the Australian Government through the Australian International Development Assistance Bureau, with which we have an ongoing partnership.

World Vision Australia strongly supports the Industry Commission's Inquiry and made a submission before it. We have long argued for common definitions and standard reporting for the non-profit sector, albeit in the context of self-regulation. World Vision Australia is a member of the Australian Council for Overseas Aid, a peak organisation within the development sector, which assists self-regulation by promoting its members' adherence to sets of financial and ethical standards.

We recognise that all our donors expect, and have the right, to know where their money goes. Accordingly, our supporters are informed about our annual aims and achievements in a number of

publications, and provided with a summary financial performance statement in the Annual Report.

Boyne Alley
Company Secretary
World Vision Australia

World Vision wasn't one of our profiled charities because we decided to focus on organisations providing aid principally within Australia.

Nursing home review

Most people agree that in 1994 there is no place in the nursing home industry for decrepit accommodation or for any charlatans who cheat and defraud the system or prey on our elderly. Yet, even in 1994, those people still flourish.

Most nursing home proprietors — the silent majority — are exceptional people who are striving to achieve excellence, but they are trapped in a regulatory system that makes it very difficult for them to improve their accommodation standards. These are not easy problems for the Commonwealth Government to tackle, but they are trying to through their Nursing Home Review.

The review, conducted in two stages by Professor Bob Gregory, discovered that a large number of Australia's nursing homes are simply not up to standard. What he could not report was the unfortunately large proportion of nursing homes that are completely run down, to the point where nursing staff are struggling to maintain the health and welfare of the residents. However, he did discover

some less than impressive statistics.

Professor Gregory's report shows the extent of nursing home building faults and estimates almost \$1 billion worth of work is required to meet the appropriate standards. The average age of the oldest buildings in each state varies from 24 to 47 years. In SA, the average age of the oldest part of private nursing homes was 80 years. On average, the most recent extension is about 10 years old. Currently, there is no depreciation element included in the SAM funding to provide for the replacement of buildings. Even if there was, there would be no incentive for proprietors to spend this money on rebuilding while they are able to make substantial capital gains from the artificial value of their bed licences.

I'm sure you will agree that it would be most unsatisfactory to have to share your room with four other people, yet 12% of nursing home residents are in rooms with five or more beds. Six per cent — 3600 residents in non-government homes — are in rooms with six or more beds. A further 39% of residents are in rooms with three or four beds.

Australian Health & Aged Care Journal and The Industry Think Tank have prepared a discussion paper for the Commonwealth Government, lobbying for change in nursing home regulation and funding structures, so that new purpose-built nursing homes can be built, providing better standards of accommodation and services for our elderly.

I have had a number of nurses, families and community workers contact me with accounts of their experience in such facilities, and the difficulties they have in providing the standards of care they want to provide.

To support our push for change we are collecting information from people within the industry which substantiates the widespread belief that current funding arrangements are inadequate and that some proprietors are allowing the level of services in their nursing home to drop below an acceptable level. Anonymity is promised in all cases, but the name of the nursing home would be required. All we seek is your anonymous letters describing some of the practices and unacceptable cost-cutting measures

Send your letters to **CHOICE, 57 Carrington Road, Marrickville 2204.**

Where possible, please include your daytime telephone number, as we may wish to contact you direct for more information or to discuss your comments and queries.

The 15th CHOICE Subscriber Draw

For new subscriptions and renewals received January 1 to March 31, 1995

Subscriber draws are now held quarterly and on April 3, 1995, we'll be holding our fifteenth. The lucky winner will be able to choose any two products from the following tests, published July 1994 to September 1994.

- ☐ Vacuum cleaners (July)
- ☐ Chainsaws (July)
- ☐ Strollers (August)
- ☐ Mobile phones (August)
- ☐ Washing machines (September)



These are products we bought for testing, so you won't be the first to turn them on or set them up. But we'll cover any service problems with a CHOICE warranty that'll match the manufacturers' — just as if you'd bought them new.

All new CHOICE subscriptions and renewals received from members and personal subscribers (including donors of gift subscriptions) by March 31 will go into the draw, unless of course you indicate you don't want to be included.

(If you're not due to renew your subscription during the period, don't worry, we'll be holding other draws during the year — your renewal notice will have the details. And if you're on a two-year subscription you'll be entered on your first anniversary as well as when you renew again.)

Use the order form overleaf

CONDITIONS OF ENTRY

- The winner will be drawn from new subscriptions and renewals from personal subscribers (including members and donors of gift subscriptions) received January 1 to March 31, 1995. If you opt for a two-year subscription, you'll be entered on your first anniversary as well as when you actually renew or subscribe.
- Information on how to enter and prizes forms part of these conditions of entry.
- Employees, and their immediate families, of the Australian Consumers' Association and its associated companies and agencies are ineligible to enter.
- Entrants must be residents of Australia.
- Applications are subject to a verification check and the judge's decision is final. No correspondence will be entered into.
- The prizes will be delivered free anywhere within Australia.
- Prizes cannot be taken as cash.
- South Australian residents may enter the draw by completing the form and posting to: Reply Paid No. 24. ACA, 57 Carrington Road, Marrickville 2204, without subscribing to the magazine. Only one entry per person is permissible through this method.
- Last date for receipt of entries to the draw is March 31, 1995. No responsibility accepted for lost, late or misdirected mail.
- The draw will be conducted at the office of the Consumers' Association at 10 am on April 3, 1995.
- The winner will be notified by letter and published in the earliest feasible issue of CHOICE after that.
- The promoter is Australian Consumers' Association, 57 Carrington Road, Marrickville 2204.
NSW Permit No. TC94/6129 issued on 2/12/94, Vic Permit No. 94/4182 issued on 2/12/94, ACT Permit No. TP94/2513 issued under the Lotteries Ordinance, NT No. NT94/2117.

that you have witnessed, and had to suffer, while trying to maintain the requisite amount of care to nursing home residents.

If you are willing to support this crusade for much-needed improvements in the nursing home industry, please write to us. Only with your assistance can we effect positive change for the benefit of staff, residents, and the greater community.

Karen Linnell
Editor-in-Chief

Australian Health & Aged Care Journal
PO Box 513, Mudgeeraba 4213

Last month's CHOICE included an article on older people's options for living at home or moving out — including into nursing homes — and discussed Professor Gregory's review in more detail.

G-code

I write re the review of the G-Code Instant Video Programmer in your June 1994 issue.

While this device may simplify normal video programming, it cannot possibly take station time over-runs into account. Frequently TV programs finish several minutes after the advertised time and ABC and SBS seem to be the main culprits in this area. (Many excellent movies, very worthy of recording, are also screened overnight when timing appears to be much more freewheeling.)

I solve this problem by usually allowing a five or 10 minute over-run when programming my VCR, and this frequently prevents the frustration of discovering that you have missed the climactic end of an all-absorbing film.

The G-Code device does not have this flexibility and will stop the VCR only at the scheduled time which is part of the code. Technical wizard it may well be, but it certainly lacks human savvy.

Harold Levinson
Vaucluse, NSW

The G-Code system typically starts recording a minute early and ends a few minutes after the nominal program end time. It's an issue which manufacturers are trying to deal with, so expect further developments.

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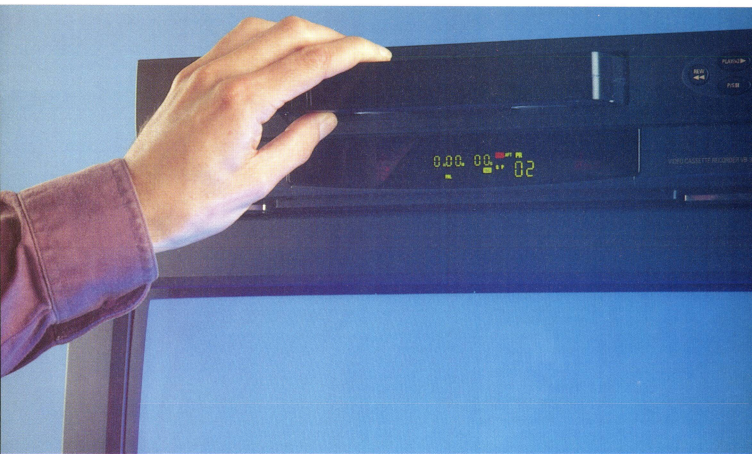
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WE LIKE TO WATCH

Have you got \$500 in your pocket and a burning desire for a video recorder?

In this report we compare six models to see what your money can buy.

THE MARKETPLACE FOR VIDEO recorders is continually changing, with new models released in regular cycles. For this article we decided to take a snapshot of the market and see what video technology we could buy for a cool half grand. We sent our buyers out to purchase all the video recorders generally available at the time for close to \$500. This gave us six models to put through our video test lab and compare for picture and sound quality, features and ease of use.

Our results show you can buy a reasonably good video recorder for around \$500 — as good as some of the ones we tested last time that cost \$100 or so more. All six models performed well for picture quality. With the exception of the PANASONIC, they all have a range of useful features, though none has sophis-

ticated features like hifi sound or digital picture effects. The major differences between the models were in how easy they were to use and, in particular, program.

PROGRAMMING FOR THE FUTURE

The human race is an ingenious species. We have achieved a level of technology undreamed of a few hundred years ago. Some advances have brought unquestionable benefit, others have created more problems than they've solved. Video recorders may well fit into the latter category when you consider the frustration and anxiety felt by many people at the thought of programming them.

Perhaps it's because video recorders are designed by people who understand Boolean algebra but used by people who just want to watch a bit of telly. What-

ever the reason, video programming is viewed as too difficult by many users.

Recent developments, such as G-Code (where you enter a special code number that tells the recorder the time, date and channel of the program to record), have attempted to address this problem. When we looked at an add-on G-Code programmer which could be used with existing video recorders (*From our lab, CHOICE*, June 1994), we found the system makes programming much easier, but it relies on the correct codes being printed in TV guides. There were also some set-up problems with the unit. None of our test models offered built-in G-Code programming, but it is available on some more expensive models.

Another area being looked at is voice-operated programming. The idea is to allow you simply to talk to your

video recorder and tell it what time, date and channel to record. This sort of technology is still a way off, so don't expect to be able to talk to any of our test models and be understood.

HERE AND NOW

Advances in video programming may be on the way but the six models in our test all use conventional methods. They rely on the user setting the start and stop times, date and channel for recording. Each model uses a slightly different way of entering the information, but they all fit into one of the three categories we've explained in *Programming methods* on page 40.

The table overleaf gives the programming method and a timer programming score for each model, which is an indication of how well designed the model is for programming. If you've had previous experience programming a video recorder using one method, you'll probably find it easier initially to program another recorder that uses the same one.

QUICK TIMER RECORDING

In previous tests we found some video recorders which offer a convenient quick timer record feature. It lets you set the machine to record a program in the next 24 hours without the need to go through the complete timer programming process. You simply keep pressing one button to set how many hours away or what time you want recording to start, and then press another button to set the recording duration or stop time. We were disappointed to find none of the models in this report have this feature.

The SAMSUNG has a less convenient feature which lets you program up to a month in advance and skips a few steps from the full programming procedure.

All the models except the PANASONIC let you set a recording duration, but you have to start the machine recording manually. The idea is that if you're watching a program but want to go out or to bed before it finishes, you can start recording and set the machine so it turns off when the show is over.

REMOTELY CONCERNED

A well laid out remote control can make the day-to-day use of a video recorder easier. As features proliferate, some remote controls look as if they'd be more at home controlling the take-off of a space shuttle than a domestic video recorder. It's all well and good to have lots of buttons on the remote that control every aspect of the model's operation, but it's next to useless if you can't find the play button.

Designers have dealt with the need to incorporate more features on remotes in varying ways. Some have lift-up or sliding covers to hide the minor controls. Others use an on-screen menu system to select some features, with arrow buttons on the remote to navigate the menus. Whatever the design, it's important that a remote control is logically set out with well labelled buttons and the main controls are easy to locate and operate.

The best remote control in our test was the one supplied with the AKAI. It's comfortable to hold and well set out. Controls for the main functions (play, record, etc) are easy to locate, and many of the less commonly used features and set-up options are accessible through an on-screen menu controlled by four cursor direction buttons. This leaves the remote relatively uncluttered but still fully featured.

The ease of use score listed in the table overleaf is an indication of how easy the recorders are to operate generally and includes an assessment of the remote control as well as the quality of the instructions.

SEE NO EVIL

All the models we tested performed pretty well when it came to putting a picture onto a television screen.

The AKAI, PANASONIC and SAMSUNG gave the best picture quality overall. They were closely followed by the HITACHI and PHILIPS, which produced an image that was slightly grainy compared with the top three, but still good. The playback picture on the NEC lacked some finer detail compared with the original picture and scored the lowest for video performance, but it was still quite acceptable.

We also ran a series of tests to determine the sound reproduction quality of each of the models. None has hifi sound, but we found the quality of the normal sound channel on all of them would be more than adequate for playback through a TV set.

WHAT TO BUY

SAMSUNG VB-336	\$499
AKAI VS-G305 EA	\$499

The SAMSUNG gave the best combination of performance and ease of use; it has the equal best picture quality and is the easiest to program. Its remote control is a little too big and bulky for our liking, but it's well laid out and reasonably easy to use. The AKAI is nearly as good — just slightly less easy to use.

SAMSUNG VB-336

This model was the best overall. It topped the field for ease of use and had equal best picture quality. It was also the easiest to program, with a good on-screen menu which prompts you through each step in the process. The remote control was quite bulky but was well laid out and easy to operate.

AKAI VS-G305 EA

A good performer overall, this model had equal best picture quality but wasn't quite as easy to use as the SAMSUNG. Programming was fairly straightforward using an on-screen menu. The remote control was well laid out and the best of those tested.

PHILIPS VR454/75

It produced a good picture, but this model was let down by its remote control, which was poorly labelled and laid out. Programming was fairly straightforward but suffered from not having an on-screen display.

NEC VN-63

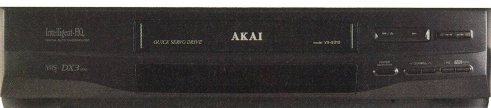
This model was generally easy to use and program but the picture quality, though acceptable, was the worst of those tested. Its remote control is a little bulky but the main controls are well labelled and set out.

PANASONIC NV-SD1A

Though up there with the best for picture quality, this model is fairly basic and lacks some convenient features. It scored lowest for timer programming as it can't be programmed from the remote control and doesn't have an on-screen display.

HITACHI VT-M328E

Difficult-to-use instructions and a poorly laid out and labelled remote control made this model the worst for general ease of use, though an on-screen menu made programming easy. Picture quality was good, but slightly behind the top performers.



Video recorders

Brand/model (in rank order)	Manufacturer/ distributor	Origin	Target price (\$)*	Warranty (years)
SAMSUNG VB-336	Samsung	Korea	499	1
AKAI VS-G305 EA	Akai	Malaysia	499	1 (A)
PHILIPS VR454/75	Philips	Malaysia	529	1
equal NEC VN-63	NEC	Korea	499	1
PANASONIC NV-SD1A	Panasonic	Japan	499	1 (A)
HITACHI VT-M328E	Hitachi	Malaysia	469	1

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in November 1994, except for the Akai, which is based on information from the manufacturer.

1	2	3	4	5	6
Number of video heads	RF out	Long play	Index searching	On-screen display	Fast se- speeds
4	VHF	✓	✓	✓	3
3	VHF		✓	✓	3
4	UHF	✓			1
4	VHF	✓	✓	✓	2
2	VHF		✓		1
4	UHF	(B)	✓	✓	1

(A) Additional two years for \$30.

(B) The model can play back recordings made with long play but can't record this way.

(C) Programming can only be done using buttons on the front panel, not from the remote.

HOW RELIABLE ARE THEY?

We asked our panel of subscribers who report on the reliability of appliances if their video recorder had needed repair in the previous 12 months. The graphs below indicate how well the most popular brands rated in the reliability stakes. On average, just over 20% of videos needed repair in that time, and the average cost for repairs was just under \$100.

Brand	% not needing repair
Mitsubishi	94
Philips	89
Toshiba	88
Sony	85
Hitachi	83
Panasonic	82
JVC	81
Akai	77
Sanyo	77
Sharp	77
NEC	75
Teac	75
AWA	71

When we asked our panellists if they'd buy the same brand of video recorder again, we got the following responses:

Brand	% who would buy again
Panasonic	92
Sony	92
Philips	90
Hitachi	88
JVC	88
Mitsubishi	86
Sharp	86
Toshiba	86
Akai	84
AWA	82
NEC	77
Teac	74
Sanyo	72

If you'd like to become a member of our appliance reliability panel, please phone our Consumer Information Service on (02) 559 9855, fax us on (02) 558 9341, or write to us.

PROGRAMMING METHODS

The video recorders we tested this time allow you to program using one of the three following methods.

■ **Set/enter:** The general idea behind this method is that you use an 'enter' button to cycle through the items (time, date, etc) you need to set. Once the item you wish to change is selected (it will usually flash), two buttons (often marked by + and - symbols) are used to increase or decrease the value. Once you've set the digit to the appropriate value, you press the enter button to move on to the next item. In this fashion you step through each item — setting the value and pressing enter — till all are set.

■ **Menu:** This method relies on a 'menu' displayed on the television screen which offers a selection of options. Usually arrow keys on the remote control (a bit like the cursor keys on a computer) are used to navigate through the menu items and change the various settings. The programming information doesn't need to be set in any order. You just move the cursor to the item you wish to change. Once you're happy with all the settings you just exit from the menu.

■ **Menu/direct entry:** This method uses an on-screen menu system like the one above, but once you're into the programming screen, the numbers are entered directly from the keypad on your remote control. The numbers must be entered in order (start time, stop time, day, month, etc) but there is no need to press an enter button between the different items — when you enter the last digit for one item (eg start time) the machine moves automatically on to the next item (eg stop time). You don't have the freedom to move around to any item in the same way as with the menu system, but this method is often less tedious than stepping through the numbers with + and - keys.

None of the methods is inherently more difficult than another, but you'll find it easier to program a video recorder which has some form of on-screen display; it will help you by indicating which keys to press. It also tends to be easier on the eye than trying to read the sometimes small digits and labels on a video recorder's front panel display, particularly when you're programming using the remote control.

	7	8	9	10	11	12	13	
ion	Numeric keypad	Programming method	Daily/weekly recording	Picture quality score (%)	Ease of use score (%)	Timer programming score (%)	Overall score (%)	Brand/model (in rank order)
	✓	menu/direct	✓	73	69	90	75	SAMSUNG VB-336
		menu	✓	73	66	80	72	AKAI VS-G305 EA
	✓	set/enter	✓	68	62	75	68	PHILIPS VR454/75
	✓	menu/direct	✓	63	67	80	68	NEC VN-63
		set/enter (C)		73	66	55	67	PANASONIC NV-SD1A
	✓	menu/direct	✓	68	50	80	65	HITACHI VT-M328E

equal

1 Number of video heads

The number of video heads a recorder has is not an indication of overall quality, but it can affect features like slow motion and long play. All VHS video recorders use only two heads during normal recording or playback; machines with three or four heads use the extra ones to enhance still and slow-motion playback or to enable features like long play. Our last report on video recorders included a detailed discussion of video heads (CHOICE, May 1994, *Counting heads* on page 34).

2 RF out

This column is important if you have an older television set. A video recorder can be connected to a TV in two ways. If your television has audio and video line inputs (sometimes referred to as an AV input), you can use them to connect the TV and video together directly. If your television doesn't have this option, you will have to connect the video using the aerial socket. In this case the video recorder appears to the television as just another station. The channel band (VHF or UHF) that the video broadcasts on is listed in this column. If you have an older TV which can't receive UHF channels and isn't equipped with an AV input, you won't be able to use the PHILIPS or HITACHI.

3 Long play

Models with this feature can record for twice as long on a given cassette. This is done by halving the speed at which the tape is pulled through the machine during recording and playback. Tapes which are recorded in long-play mode can't be played back on machines without this feature. There is a slight loss of picture and sound quality when you use long play but it's generally not too noticeable.

Many VHS-C compatible camcorders have long play to lengthen the recording time on their comparatively short cassettes, so people who own one of these may need a video recorder with this feature to ensure they can play back their home videos.

4 Index searching

If you record a number of different programs on one tape, this feature lets you set electronic index markers at the beginning of each program and quickly search for them at a later date. Index markers are automatically set whenever you start a recording. All the models with index searching, except the PANASONIC, also have a feature which locates each index point on a tape in turn and plays a short excerpt from that point, making it even easier to check what programs are on the tape.

5 On-screen display

Models with this feature use the television to display information to the user rather than relying on the small front panel display. Information about programming, channel tuning, etc., is usually much easier to read on a TV screen.

6 Fast search speeds

This column lists the number of fast picture search speeds available on each model. Multiple speeds can be useful when searching a tape to find a particular scene — you may want to search slowly through some parts but quickly through others. It tends to get a bit confusing if the machine has more than two or three speeds.

7 Numeric keypad on remote

A numeric keypad on the remote control allows you to select channels directly by entering the channel number. The AKAI and PANASONIC don't have numeric keys, so you have to cycle through channels using the up/down buttons. They can both be set to skip over unused presets, making it less tedious to find channels using these channel up/down buttons.

8 Programming method

All the video recorders in this test, except the PANASONIC, can be programmed using the remote control. All are programmed in slightly different ways, but they can be grouped into three general methods: set/enter, menu, menu/direct entry (see *Programming methods*, left, for details).

9 Daily/weekly recording

All the models we tested can be programmed to record at least four different programs up to a month or more in advance. The models with a tick in this column have special settings to enable you to record a program at the same time every day or the same time once a week, making it easier to program for recording a serial.

10 Picture quality score

The picture quality score is composed of two parts:

- An 'off-air' picture assessment, where a selection of broadcast programs was recorded on each machine and the quality of the recorded picture was assessed by our tester.
- A more technical video test made by recording various test patterns and examining the quality of the recording.

11 Ease of use score

This score is an assessment of each model's general ease of use; it includes an assessment of the layout, labelling and ease of use of the remote control and the quality of the instructions.

12 Timer programming score

In assessing the ease of programming, we looked at how well the programming method was implemented, how helpful and useful the display was and whether the various buttons and features helped or hindered the task.

13 Overall score

The overall score was a combination of the above three scores weighted as follows:

- Picture quality: 50%
- Ease of use: 30%
- Timer programming: 20%



PLUG-IN PROBLEMS

Plug-in timers can turn your appliances on and off when it suits you — when you're not awake or to give would-be burglars the impression your home is occupied when it's not. That's the idea, anyway. We tested them to see how well they live up to this promise and found little to recommend.

ON THE FACE OF IT, plug-in timers are a great idea. You could use them to switch on your heater to warm the room before you get up on winter mornings, switch your electric blanket off an hour after you go to sleep or turn on some lights and the television every evening while you're away on holidays so it looks and sounds as if you're home. Maybe you have to negotiate steep stairs in the dark to get to your door: a timer could turn on your outside light just as you return home. The possibilities seem limited only by your imagination.

The possibilities are definitely there, but the unfortunate fact is that most makers of these potentially nifty devices have so far failed to come up with a design that's easy to use, reliable and safe.

We tested all the single-outlet plug-in timers available in October last year to see just what they could do — and, more importantly, whether they were safe. The results were disappointing.

FEATURES AND FUNCTIONS

Essentially, all the timers (except the **CLICK CCT 200**) require you to set the correct time and then the interval or intervals for which you want your attached appliance to be turned on. Their usefulness depends largely on how accurately they keep these settings. The degree to which you'd bother with them at all is determined by how easy they are to program. So accuracy and ease of use were the main criteria we tested for.

Most timers plug into an ordinary electrical socket and have some sort of device to switch the power on and off for preset intervals, although there are a couple of notable exceptions. The **CLICK CCT 200** is the electrical equivalent of a garden watering timer — it will only turn the power supply *off*, and then only up to two hours from the time it's set, making it far less useful than any of the other models.

Two of the three digital models can

be set to turn on and off randomly, presumably as a burglar deterrent. This might save you the trouble of presetting times, but we question the deterrent value of lights and noise erupting at random intervals that could be as short as a few minutes! To someone observing your place for more than a short while, this could act as a flashing, blaring advertisement that no one is home. The **KAM-BROOK KD86** at least allows you to turn this feature off and preset your own times. The **CLICK CET 240R** gives you no choice. All it will let you do is select the hours of the day during which it randomly operates; it makes its own decisions about when the appliances go on and for how long.

Most of the timers have a 24-hour programming span, but four allow different times to be preset for up to seven days and one other can be used as either a daily or weekly timer (see the table overleaf). The seven-day variety will allow you to program a different pattern

of ons and offs for different days of the week instead of reprogramming them daily, which you might see as an advantage.

FATAL FLAWS

These products can have a variety of problems, but by far the most common and worrying is that, to varying degrees, many are potentially unsafe.

On three models, the **CLICK CET 240R** and **CET 700** and the **HPM 818**, we found the front panel could be removed when the timers were plugged in, exposing live parts inside. We didn't need tools to do this — several people could manage it with their fingernails. It may seem an unlikely scenario, but none of the other timers had this problem and we don't see why you need to buy one that has even a remote possibility of letting you come into contact with live parts. These three therefore dropped to our 'not recommended' list. The manufacturer of the **HPM 818** has assured us this problem will be fixed.

Of the 15 timers tested, eight relied on tiny removable pins as their means of setting the time intervals. These not only require some dexterity to use, making programming slow and finicky, they are easily dislodged and, if you drop them onto carpet, you'll need keen eyesight to find them again. It's easy to imagine losing enough of these pins to render the timer unusable. More seriously, they could be swallowed or inhaled by small children. We can't recommend any of the models that have them.

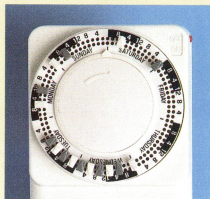
All four **CLICK** timers, as well as the **KAMBROOK KD84** and **KD86**, were found to have a problem meeting the amended Australian Standard covering these products. A system of 'shrouds' on some electrical sockets has been developed in recent years to reduce the risk of electrocution when pulling a plug from

HOW THEY WORK

The timers we tested work in a variety of ways. Like many things these days — from music recordings to mobile phones — they divide into two categories: digital and analogue.

Because the analogue models rely on physically positioned pins to trigger a switch mechanically, they may gradually wear with use and eventually work less accurately or wear out altogether. Their settings are also imprecise: the smallest time interval on any of them was 15 minutes, and the seven-day models have a rather clumsy two-hour minimum. If these timers are disconnected from the power for long you'll have to correct the 'current time' setting.

Digital timers are electronic, so they have fewer mechanical parts that are subject to wear. Their settings are also more precise, with minimum time intervals of one minute. Digital precision could be handy, perhaps for recording a radio program or if you want to synchronise more than one timer. All three digital models we tested have batteries, so the time and settings are maintained even when they're not plugged in or during a power failure.



Some analogue models like the **Ringrip RMT7** pictured require you to insert tiny pins into small holes in a dial, which slowly revolves. You set the dial by aligning a marker with the current time. You put the pins into the holes that correspond to the on/off time settings you want, and the dial moves the 'on' pins round until they strike a switch, allowing the power to flow. A second pin turns off the electricity at the set time.

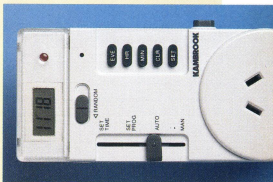
Not only are the pins a pain, in many cases you can't tell which holes correspond to 'on' and which to 'off'. Our tester suggested that a simple colour scheme would simplify matters, something that doesn't yet seem to have occurred to any of the manufacturers.



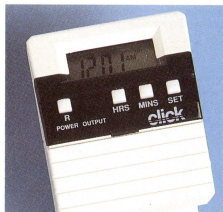
Two analogue models, the **Kambrook KD84** and the **HPM 818**, avoid problems with fiddly pins by using non-removable sliding pins, each representing 15 minutes. These are also small and are best set using a pen or screwdriver, but they can be worked into position by a fingertip, particularly if you're not too fussy about great timing accuracy. The orange background (which both have) also helps make the interval settings clear.



The analogue **HPM 818** has a system using two pointers on a dial to indicate the on and off times. This is simple and effective but allows you to set only one on/off cycle.



Digital timers like the **Kambrook KD86** pictured are set like digital clocks: you just punch in the appropriate times. They're generally easier to set than analogue models, and more accurate.



We could remove the front panel of the **Click CET 240R** and **CET 700** with fingernails, exposing live electrical parts.

Timers

Brand/model (in rank order)	Manufacturer/ distributor	Origin	Target price (\$)*	Warranty (years)	Type	On/off intervals	Setting dura- tion (days)
WHAT TO BUY							
KAMBROOK KD84	Kambrook	Singapore	25	1	Analogue	48	1
KAMBROOK KD86	Kambrook	China	30	1	Digital	4 (C)	1
HPM 819	HPM Industries	China	19	not stated (B)	Analogue	1	1
NOT RECOMMENDED							
HPM 818	HPM Industries	Taiwan	26	not stated (B)	Analogue	48	1
CLICK CMT100	Click Industries	Taiwan	25	1	Analogue	4	1
CLICK CET 700 (A)	Click Industries	Australia	49	1	Digital	7	7 (F)
HPM 810	HPM Industries	China	19	not stated (B)	Analogue	5	1
KAMBROOK KD90	Kambrook	Taiwan	20	1	Analogue	10	1
CLICK CCT 200	Click Industries	Australia	29	1	Analogue	0 (D)	0 (G)
ARLEC PC844	Arlec Sonar	not stated	17	1	Analogue	4	1
RINGGRIP RMT1	Ringrip	China	27	3	Analogue	4	1
HPM 811	HPM Industries	Taiwan	21	not stated (B)	Analogue	8	7
ARLEC PC877	Arlec Sonar	not stated	22	1	Analogue	8	7
RINGGRIP RMT7	Ringrip	China	28	3	Analogue	8	7
CLICK CET 240R	Click Industries	Australia	49	1	Digital	4 (E)	1

* Prices supplied by manufacturer/distributor in November 1994.

(A) CEP on the timer itself, but CET on the packaging.

(B) No mention of warranty on packaging or in instructions.

(C) Actual number of on/off cycles can be much higher if random function is set.

(D) This model can only turn power off, so you can't set on/off cycles as with the other timers.

(E) On/off cycles themselves can't be set, only intervals in which they occur randomly.

(F) Can also operate as a 24-hour timer — see Note 3 opposite.

(G) Can only be set to turn off up to two hours after being set.

(H) Accuracy is not an issue for this timer as it only operates randomly, not at set intervals.

or inserting one into a live socket. These shrouds are plastic ridges on the sockets of extension cords and power boards that will prevent contact with the pins of the plug until they are fully removed from the outlet; that is, no longer live (see the diagram below).

The standard, which will be phased in from August 1995 and will be mandatory for extension cords from 1997, specifies a height of 8.6 mm for these shrouds. The trouble is, unless the plug that goes into such an arrangement has a complementary 8.6 mm platform, it's possible the shroud will prevent the pins from making proper contact with their receptacles in the socket. Electrical arcing and/or overheating may occur and possibly result in a fire, or if something found its way into the gap between plug and socket it could become live. None of the six above-mentioned timers had the requisite 8.6 mm platform.

This is not a problem when such a

plug is used in an ordinary flat power point, but may become a problem as shrouded sockets become more common. The manufacturers have told us they have rectified this problem and will release complying models this year, to coincide with the phase-in period of the amended standard. If you don't have extension cords or power boards with shrouds you'd be OK to buy them.

The standard also specifies a 'forbidden zone' in the allowable width of an electrical plug. The idea is to prevent a situation where two plugs that are too wide to fit properly are forced into adjacent sockets, which, again, could lead to poor contact, arcing and fire. For this reason plugs must be either less than 43.8 mm wide (so two can fit comfortably side-by-side) or wider than 54 mm (so the adjacent socket is blocked and the problem doesn't arise). The plug width of the CLICK CCT 200 falls within this forbidden range. This presents no danger

when it's used in single outlets or on its own in dual sockets, but it nonetheless fails to comply with the standard.

WHAT TO BUY

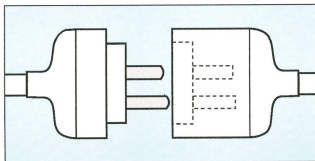
KAMBROOK KD84*	\$25
KAMBROOK KD86*	\$30
HPM 819	\$19

* Not suitable for sockets with shrouds.

Having rejected the three timers whose covers came off without the aid of tools to expose live connections, the eight with small, potentially dangerous pins, and the CLICK CCT 200 which had limited usefulness and poor accuracy, we were left with just three models from all those on the market: the HPM 819 and, for sockets without shrouds, the KAMBROOK KD84 and KD86.

So, based on our evaluations, just one timer came out without a problem: the analogue HPM 819. It is also a reasonable performer, very quiet and easy to set using two pointers on a dial. A drawback is that it only allows you to program one on/off cycle per day.

You can see how the timers performed in our tests for accuracy, ease of use and noise in the table above. They are listed in rank order according to overall performance, but we've split them into 'What to buy' and 'Not recommended' groups. All in all, not a dazzling array of high-quality products.



How the 'shroud' and platform on socket and plug are supposed to interact — if the platform's the wrong size there could be a problem.

	5	6	7
	Ease of use score (%)	Accuracy score (%)	Overall score (%)
	75	87	80
	70	100	79
	75	75	78
	85	94	88
	75	96	82
	70	100	79
	70	83	74
	75	78	72
	75	36	70
	70	67	64
	55	87	61
	70	0	56
	65	0	51
	55	0	44
	70	not applicable (H)	not applicable

Brand/model
(in rank order)

WHAT TO BUY

KAMBROOK KD84

KAMBROOK KD86

HPM 819

NOT RECOMMENDED

HPM 818

CLICK CMT100

CLICK CET 700 (A)

HPM 810

KAMBROOK KD90

CLICK CCT 200

ARLEC PC844

RINGGRIP RMT1

HPM 811

ARLEC PC877

RINGGRIP RMT7

CLICK CET 240R

1 Type

This is the maximum number of time intervals that can be set during the timer's period of operation, as it is supplied. You can buy extra pins for both **ARLEC** models to give you more intervals — and perhaps replace those you've vacuumed out of the carpet.

2 On/off intervals

The longest period for which you can program the timer: either 24 hours or seven days. If left connected to power, both types will repeat the programmed pattern indefinitely, either daily or weekly, although gradual timing inaccuracy may cause them to drift off set times with prolonged, uninterrupted use. The exceptions are the **CLICK CCT 200**, which can only be set to turn power off once, and only within two hours of setting, and the **CLICK CET 700**. It has a base cycle of 24 hours but also allows different daily patterns over a seven-day period, so it can be used as either a daily or weekly timer.

3 Setting duration

You might sometimes want to use a timer close to your bed, so even low-level noise could prove aggravating. We scored them on a sliding scale between 15 dB or less (100%) and 30 dB or more (0%).

4 Noise score

You might sometimes want to use a timer close to your bed, so even low-level noise could prove aggravating. We scored them on a sliding scale between 15 dB or less (100%) and 30 dB or more (0%).

5 Ease of use score

The timers were rated according to the time and effort required to set the current time and on/off intervals, how easy it is to manipulate the pins or buttons and remember which pin or memory turns the appliance on and which turns it off, and how clear and helpful any instructions or markings on the timer itself are.

6 Accuracy score

Scores are based on the number of minutes the on/off intervals we timed varied from those we programmed. These were averaged over a number of intervals and converted to a percentage score.

7 Overall score

This is a combination of the scores for ease of use (70%), accuracy (20%) and noise (10%).



On the whole we found the timers a pretty poor bunch — most of them are potentially unsafe as well as badly thought out in terms of ease of use. Based on our evaluations, only the HPM 819 (top left) came out with no problems. The other two are the Kambrook KD 86 (bottom) and KD 84, which are OK for sockets without 'shrouds' (see the article for an explanation).



WHAT DO YOU KNOW?

1 Where would you find a T-switch and what is it for?

- A) Video recorders. The T-switch enables you to record television programs without fuss.
- B) Cameras. The T-switch enables you to switch automatically to a telephoto lens.
- C) Hearing aids. A T-switch activates telecoil circuitry in a hearing aid, switching off its normal microphone so the aid can tap directly into the sound coming from an induction loop.

2 In Germany various organisations are lobbying for carpets to bear a 'rugmark'. What is this mark supposed to indicate?

- A) That the carpet is made of pure new wool.
- B) That the carpet is made in countries of the European Community.
- C) That no children have been employed in the carpet's manufacture.
- D) That it's a 'genuine' carpet made in countries traditionally well-known for carpet making.

SPOT THE RUGMARK



3 If you don't agree with the service, care and attention you receive in a hospital, you have the right to discharge yourself.

True or false?

4 Oily or pimple-prone skin benefits from an astringent facial toner, which closes large pores.

True or false?

5 The skin is the largest and heaviest organ in the body. How much does it weigh on average?

- A) 1.6 kg in women, 2.4 kg in men.
- B) 3.2 kg in women, 4.8 kg in men.
- C) 6.4 kg in women, 9.6 kg in men.



6 Rechargeable nickel-cadmium batteries are commonly used in consumer electronics, portable tools, shavers and other devices. According to manufacturers, how often can they be recharged?

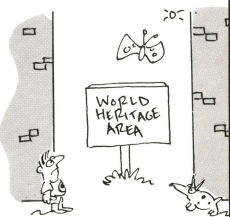
- A) 50 to 100 times.
- B) 100 to 500 times
- C) 500 to 1000 times.
- D) indefinitely.

7 In small household batteries (dry cells), which metal has been significantly reduced or totally eliminated in recent years?

- A) Lead.
- B) Cadmium.
- C) Zinc.
- D) Mercury.

8 More than 400 world heritage areas (as at October 1994) are listed all around the world. How many of these are in Australia?

- A) 5.
- B) 11.
- C) 17.
- D) 20.



9 A hectare is 10,000 square metres (or approximately 2.47 acres). How big is Kakadu National Park in the NT (in hectares)?

- A) 1,975,700 hectares.
- B) 197,570 hectares.
- C) 19,757 hectares.

ANSWERS

1. C. Induction loops can be found in all manner of places, from the walls of public halls, theatres and cinemas, to telephone receivers. They provide invaluable assistance to suitably equipped hearing-impaired people.

2. C. In India, Nepal and Pakistan, about 750,000 to one million children currently work on carpets, sometimes for long hours and without wages. Children's and human rights organisations, unions and consumer associations want to change this practice.

3. True. But you're then responsible for any illness or injury caused or made worse by leaving hospital. If you're suffering from certain infectious diseases or psychiatric conditions, you can be forced to stay against your will.

4. False. While facial toners aren't harmful and can feel pleasantly refreshing, they don't close pores. Pores don't open and close like flowers.

5. B. It's 4 mm thick on average and renews itself in 28 days.

6. C.

7. D. Most major battery and electronic appliance manufacturers no longer add mercury to dry cell batteries. It's still used in some button cells, but they're increasingly being replaced by alternative types which contain only trace elements of mercury.

8. B. They are: the Lord Howe Island Group, the East Coast Temperate and Sub-tropical Rainforest Parks and the Willandra Lakes region in NSW; Kakadu and Uluru National Parks in the NT; the Great Barrier Reef, the Wet Tropics and Fraser Island in Queensland; the Tasmanian Wilderness; Shark Bay in WA; and the Australian fossil mammal sites in north-west Queensland and south-east Australia.

9. A.



RECALLS AND BANS

If you find a recall or ban not on our list, please let us know. Companies often rent 008 or 1800 numbers for a couple of months after the recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

Stafford-Miller has recalled QUELLADA HEAD LICE TREATMENT, as the product information leaflet contains incorrect information. The insert advises: "If swallowed, induce vomiting." It should read "do not induce vomiting". The correct statement appears on both the bottle label and the box. Discard the inaccurate leaflet or call 008 224 536 for a replacement.

Saab Automobile Australia has recalled SAAB 9000 motor vehicles, as cracks could develop under the hose clips on two rubber hoses between the fuel filler housing and the fuel tank. Affected models are in the following chassis number ranges: N1041085 — N1049024 (built in 1992) and P1000001 — P1015289 (built in 1993). The chassis number and year the model was built can be found on the vehicle identification plate located on the right-hand wheel arch under the bonnet. Contact your Saab dealer to arrange for replacement of affected hoses and hose clips. Meanwhile, avoid filling the fuel tank completely. Keep the level below 3/4 full.

CHOICE

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We work on behalf of Australian consumers by producing and providing useful and accessible information, and representing and advancing their interests.

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Registered office: 57 Carrington Road, Marrickville NSW 2204

Telephone: (02) 558 0099 **Fax:** (02) 558 9341

Subscription enquiries: (02) 558 8088 **Consumer Information Service:** (02) 559 9855

Chief Executive Officer: Louise Sylvan **Executive Assistant:** Maryann Scott

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TWELVE MONTH INDEX

MARCH 1994 — FEBRUARY 1995

(T) Test
(D) Includes assessment of suitability for people with disabilities
(U) Update of previous report
* Additions or corrections to reports, small follow-up items, or letters

Aids for the disabled	Nov	Food		Nutrient claims on food labels	Feb
Alarms, personal emergency	Apr (T,D)	artificial sweeteners	May	Nutrition information trends	Aug
Annual buying guide	Dec	fast foods	Apr (T)		
Artificial sweeteners	May	frozen meals	Sep (T)	Older people, caring for	Jan, Feb*
		healthy eating	May	Oven cleaners	Sep (T), Nov*
Baby monitors	Nov (T,D)	nutrient claims on labels	Feb		
Bank service	Sep	nutrition information trends	Aug	Paint, exterior	Aug (T), Oct*
Batteries, disposal	Feb	pâté	Jun (T)	Pâté	Jun (T)
Binoculars	Mar (T)	peanut butter	Jul (T)	Pedestal fans	Oct (T)
Birth control, methods of	Oct	sandwiches, pre-packaged	Feb (T)	Peanut butter	Jul (T)
Bullbar dangers	Jun	trends	Dec	Petrol, half lead	Oct
Buying a fitted kitchen	Sep	Food processors	Nov (T,D)	Plastics recycling	Jun
Buying guide, annual	Dec	Ford truck warranty	Jul	Portable stereos (with CD player)	Jan (T)
		Frozen meals	Sep (T)	Prescription drugs, cheaper	Jan
				Public transport	Sep
Cars					
bullbar dangers	Jun	G-Code programmer	Jun (T), Feb*		
crash tests	Aug	'Green' organisations	Oct	Refunds	Feb
half lead petrol	Oct			Reliability survey, cars	Mar
recalls	Dec	Half lead petrol	Oct	Repellents, mosquito	Jan (T), Feb (U)
reliability survey	Mar	Health insurance	May, Aug*		
roadworthiness	Apr	Healthy eating	May	Safety switches	May (T)
Carers, services for	Apr, Oct*	Hearing aids	Apr, Oct*	Sandwiches, pre-packaged	Feb (T)
Caring for older people	Jan, Feb*	Heaters, fan	Jun (T,D)	School sponsorship	Apr
Carpets		Hot water trial	Sep	Selling your home	Jun
buying	Mar			Solar lamps	Oct (T)
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Champagne and sparkling wine	Dec (T)	Insect repellents	Jan (T), Feb(U)	Statutory derivative action	Aug
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Childcare	Oct, Nov	information brochures	Aug	Strata management	Dec
Chipper/shredders	Jan (T)	health	May, Aug*	Strollers, layback umbrella	Aug (T,D)
Compost bins	Dec (T)	income protection	Jul, Oct*	Sunscreen fabrics	Jan (T)
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Contraception, methods of	Oct	Investment options	Mar	Telephone, privacy	Jun
Credit card costs	Jan	Irons	May (T,D)	Telephones, mobile	Aug (T), Nov*
Credit Reference Association	Sep			Televisions, large-screen	Jun (T)
		Kitchen, buying a	Sep	Timber, how to buy 'green'	Feb
Deadlocks	Dec (T)			Timer switches, electric	Feb (T)
Disabled, aids for	Nov	Labelling, nutrient claims	Feb	Toasters	Mar (T,D)
Drugs, cheaper prescriptions	Jan	Lamps, solar	Oct (T)	Transport, public	Sep
		Lawn trimmers	Oct (T)		
EnergyCard	Jan	Life insurance commissions	Aug	'Unstainable' carpet	Oct (T)
Ethical investing	Jun	Locks, exterior door	Dec (T)		
Eyes, looking after	Mar, Oct*			Vacuum cleaners, low-priced	Jul (T,D)
		Market competition	Mar	Video recorders	May (T), Feb (T)
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		Mosquito repellents	Jan (T), Feb(U)		